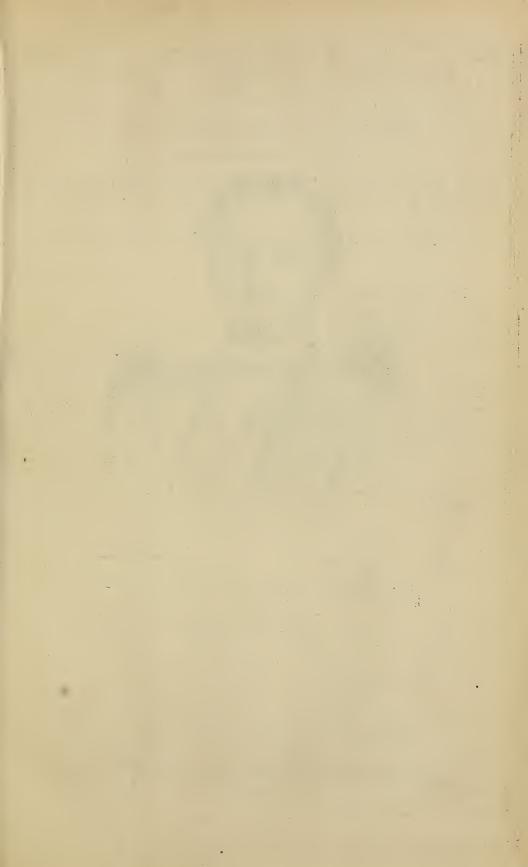
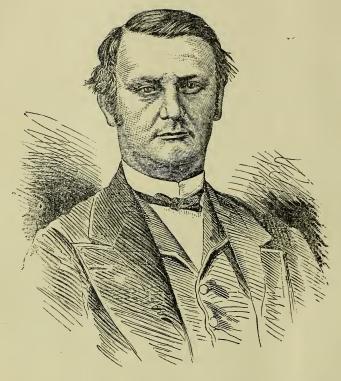
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MARYLAND FARMER:

DEVOTED TO

Agriculture, Horticulture, and Rural Economy.

Vol, XV.

BALTIMORE, MARCH, 1878.

Advantages of the Township System.

In our last monthly issue we spoke of the Township System as one best adapted for the promotion of the interest of the different counties of the State, and calculated to further the prosperity of every individual of each county. We are aware of the common prejudice that exists in the South against New England systems; but we feel sure, that prejudice is wearing away, so far at last, as to recognize what is really worth imitating in the management of communities, or in the snbdivisions of authority in the Northern States. We may call our system, the district system or by any other title, so the essentials of the system is ob-

We can not do better in setting forth the Township System, than quoting from a well-written treatise upon its advantages, by J. H. Stickney, Esq., of Baltimore,-addressed to the people of Maryland in 1875. In which he says:

"The entire area of the county is divided into a convenient number of towns, with boundaries definitely ascertained, and positively fixed by law, somewhat like our "election districts," but generally of smaller extent. Each of these towns is a body Corporate with all the powers necessary to a legal corporation. Every voter living within the boundaries of the town is, by virtue of his resi-dence, entitled—as a stock holder in any ordinary corporation-to a voice in the management of the business of the town. Certain things are required of these town corporations in conformity to general law. The mode of meeting the requirements is determined, and the town officers through whom it shall be done, are selected by the voters assembled in general town-meeting, and acting as a pure democracy.

"The incorporation of a town is at once followed by a publicly-called meeting of all the legal voters within its bounds. The published notice of this and every subsequent meeting of the town must specify all items of business that are to be brought forward for discussion and action. This affords ample opportunity for forethought and consideration upon the part of those called to act."

"The public interests confided to the town ad-

of property; the levying, assessment and collection of all taxes; the building, preservation and repairing of roads and bridges; the entire management (in harmony with, and subordination to, the general school system of the State,) or the schools and general educational interests; provision for, and care of, the poor, or those who in whole or in part are unable to provide for themselves and have no friends able to do so; the protection of the community against criminals, vagrants and infectious diseases, nuisances—or, as it may be expressed, the policing of the town, and the direction and management of all elections, State and National.'

"The citizens of the town elect by ballot annually those to whom, for the ensuing year they will confide the discharge of the duties involved in these important local interests. As the manner of their discharge affects directly the purse, and the comfort and welfare of every person, it will seldom happen that any will be selected other than those who are the most respectable and respected of the citizens; those who are entitled to, and who have, to the greatest extent, the confidence of their neighbors and acquaintances."

"The ordinary complement of town officers is

A Town Clerk,

A Town Treasurer, A Collector of Taxes, A Board of Selectmen—three or five,

A Board of Assessors—three or five,

A Board of Overseers of the Poor-three

A School Committee-three or five,

and Road Surveyors, in number to be fixed by each town for itself according to the extent of roads and the amount of labor required upon them."

"In practice it is customary to unite either two or all three of the "Boards" in one, and to call upon the same men to act at the same time as 'Selectmen,' 'Assessors' and 'Overseers of the The same individual is frequently (perhaps generally) called upon to discharge the duties both of Town Clerk and Treasurer."

"The office of Town Clerk is a very important

one under this system. He makes and preserves a full record not only of all public 'town meetings, but of all important action of the Selectmen,—of all births, marriages and deaths within the town, and of other matters of public interest. records are the amplest material for history, and in many of the towns of New England, it is safe ministration are: the ascertainment of the value to say, that not a birth, marriage or death, nor any

other event of interest or importance has occurred within the last two centuries, that will not be found duly chronicled in the records of the Town Clerk. If he unites the office of Treasurer also, he has besides, of course, the custody of the moneys of the town, and their disbursement under the direction and by order of the 'Selectmen,' and in payment of bills audited and approved by them."

"But the chief executive power is vested in the Board of 'Selectmen'-a term which for more than two hundred years has designated those chosen to have a general charge of the towns of New England. The number of selectmen varies from three to seven, and they constitute a kind of executive authority as regards the entire administration of the township. They are especially intrusted with the responsibility of executing those matters which have received the approval of a majority of the voters at any legally called meeting. Every public internal improvement of a local and public nature is commenced and completed under their supervision. They have in charge the direction of the repairs and building of roads and bridges, and act as the agent of the town in making contracts and seeing that they are faithfully performed. It devolves upon the selectmen, also, in case of contagious disease, to take every precaution to keep it from spreading. All of their acts are subject to the final approval of the town: but within the bounds of their duties they are allowed large discretionary powers. At the close of the year they render a full report of their official work, with the expenses that have been incurred, and at the same time render a careful estimate to the best of their knowledge of what will be required for repairs and public improvements during the next twelve months. It is upon these estimates-including any past deficiency-that the rate of local taxation is based for the year. They also report, annually, the statistics and condition of the town to the Legislature of the State."

"A School Committee is elected who have charge of the direction of educational affairs. They advise regarding the location and cost of school-houses, and co-operate with the selectmen in the execution of the laws of the State pertaining to education. The selection and examination of teachers, and the visitation and the examination of the schools, is also a part of their duty."

[In some of the Northern States, there is an agent elected in each town to supervise the management of the Schools, and who selects the teachers from the number that present certificates of qualifications from the School Committee.—Eds. Md. Far.]

This writer quotes the approval of this plan by Mr. Jefferson, in a letter from Monticello in 1816, in which he says:

"Let the counties be entrusted with the local concerns of the counties, and each ward (or, as he expresses it elsewhere, 'called, in New England, towns') direct the interests within itself. It is by dividing and subdividing these republics from the great national down through all its subordinations, until it ends in the administration of every man's farm by himself; by placing under every one what his own eye may superintend, that all will be for the best," and "I conclude every opinion with the injunction, divide the counties into wards.

Begin this only for a single pupose: they will soon show for what others they are the best instruments." No American Statesman ever appreciated more clearly and fully than Mr. Jefferson that a true democracy rests upon the participation of every individual, worthy of citizenship, in the management of public affairs."

Mr. Stickney comes to the following just conclusions, which fully corroborates our views as expressed in our editorial first above alluded to:

"We are fully justified, by the experience of other States, in saying that if the State of Maryland were divided into townships, every man would, in a greater degree, feel that he was called upon to take a direct personal part in the conduct of affairs,—thus fulfilling the true democratic idea as expounded by statesmen like President Jefferson, and developing a local pride and interest which, multiplied throughout the commonwealth, would give a fresh impulse to its moral, intellectual and material growth."

We shall pursue this subject in our next number, and again call to our aid this admirable essay. We cannot close, however, without one more short quotation as to the *expenses* of this Township System.

"On referring to the annual reports, gathered at random, of a considerable number of towns where the system has long prevailed, it is found that in the first the salaries and all incidental expenses of the town officers for the year were \$249; in the next \$761, on a total expenditure for the town of \$46,318; in the next \$188, in a total expenditure of \$9,428; in the next \$1,133, in a total expenditure of \$35,190; in the next \$1,413, in a total expenditure of \$43,854; and so on."

"It is proper to be said, that in the total expendlture is included all State and county taxes, as well as town expenses proper; and in the compensation of officers, the expense of assessing and collecting all taxes,—town, State and county,—as well as the supervision of roads, schools, paupers, criminals, &c. So that the exhibit shows the entire public burden. Surely the cost of the organization is not such as need alarm the most economical. Besides which it should be borne in mind that the people have at all times in their hands, by means of their annual elections, a very satisfactory guarantee against any extravagance, dishonesty, or wrong, and a very prompt redress if such should occur."

It will thus be seen that although the numbers of officers in the counties would be greatly increased, yet, the expense of these for the entire management of all the affairs, the collection and disbursement of all taxes and appropriations for State, County and Township, does not exceed 2 or 3 per cent. on the whole levy, which is less than our collector's of tax alone receive under our Maryland system as now existing.

GIANT HORSES.—The Maysville (Ky.) Bulletin says that Ed. Morton, of Aberdeen, Ohio, shippep to Boston lately a lot of fine horses, among them two greys, four years old, twenty hands high. The two weighed 4,500 pounds. They were purchased for an ire firm in that city.

Agricultural Calendar.

FARM WORK FOR MARCH.

Every man who means to farm this year has doubtless made all his arrangements and laid out his plans, if he has not, there is no time to be lost in doing so. To farm successfully there must be system and order, and all that is intended to be performed shall be considered and arranged before hand, and be followed out strictly. No one builds a house before he has his drawings and estimates complete; neither should the farmer commence his year's operations before he has set down his intentions of what he means to do, and estimated the cost, and compared them with his probable pecuniary resources.

This is an important month to every farmer—if the season be propitious—as is often the case, he can by diligence advance his spring work, and if April proves unfavorable, he will be thus far advanced in his work over those who failed to avail themselves of the good weather in March, for plowing, &c.

OATS.

Embrace the earliest opportunity to sow oats,—earlier sown the best. Plow up the land, if corn ground; then harrow the oats in, or better, shovel in with double iron shovel plows the oats, and then sow the clover or other grass seeds, and roll with a heavy roller.

FENCES.

Repair and make new fences this month if you possibly can. Good fences make good neighbors, and save much loss of crops by preventing depredations of stock on your own crops.

CLOVER AND OTHER GRASS SEEDS.

On wheat or tye crops sow clover and other grasses for pasture. All seeds do not mix well together for sowing, therefore, best sow each separately, that is, red and white clover can be mixed and sown together, but clover and red top, orchard and Kentucky grass seeds cannot be well mixed to sow. The clovers and timothy may be mixed so as to sow at the same time, and then the other grasses can be mixed and sown. After all are sown, harrow well, it will help the growing grain, and then roll well, so as to close the earth over the newly sown seeds and roots of the grain that have been disturbed. This working and loosening the soil and then re-compacting it will give a stimulus to the grain growth, and at the same time ensure the vegetation of the newly sown grass seed. Then follow this process by sowing 2 or 4 bushels of salt and one of plaster on each acre.

If you desire to go further in the way of fertilization to secure a good growth of the grass seeds and assist the grain crop materially, sow over each acre 3 or 400 lbs., or less of bone dust vitriolized, or Pure Missouri Bone Meal that has been nitrogenized.

TOBACCO.

The winter has been so favorable for "stripping" that we presume the crop has been stript and is now being "conditioned." It should be the aim of every farmer to send their tobacco into market in best possible order. Tobacco seed should be sown when the ground is in a nice state to work. Every farmer should have a hot bed for tobacco plants, besides those in the open air. Some plants have experienced the greatest benefit from these hot beds, for without them, some reasons, they could not have planted their crops, It is gratifying to hear that many planters have at last determined to reduce their crops so far as the number of plants are concerned, and thus reduce the amount of labor; but making the land rich and cultivating better, keeping the plants free from worms, topping low and keeping down the suckers or sprouts at the joints, taking more care in curing, assorting, and preparing it for market, expect to, and no doubt will, realize more clear profit for 10 acres, than of late years they have got from 20 acres, under the old system, as pursued in Maryland,

POTATOES.

The potato crop should be planted now or half of it at least. The early crop is best generally of late years, and it brings better prices than if it is late and has to encounter the Northern and Western crops in the late fall and early winter market of this vegetable. The ground should be highly manured and well prepared by deep plowing and harrowing, and some fertilizer, sprinkled in trenches or furrows of the rows. Ashes and plaster; sheep manure and rich earth composted; hogs hair, tobacco stalks, cut fine, any of these are excellent to scatter over the potatoes in the rows before they are covered over. Plant about 4 inches deep in mellow soil. The potatoes should be cut a week before planting and rolled in plaster and spread on the barn floor not more than 3 or 4 inches deep. Some prefer planting whole small potatoes, but in most cases small potatoes have not perfected their growth, hence we would prefer planting large potatoes cut in pieces with two good eyes to each

PLOUGHING.

Embrace every opportunity to push forward the plowing up of all land intended for crops.

STOCK OF ALL KINDS,

Young stock: Keep these in good plight by giving them a plenty of long food and grain ground coarse.

Sheep:—Require strict attention this month. Read and practice what Col. Ware says in this number of the Maryland Farmer. You cannot find a better mentor on the subject of sheep breeding, feeding, &c. We would call also particular attention to the excellent article of Prof. Yeomans in our columns this month, upon the management of sheep.

Milch Cows:—Keep these dry, warm, well fed and well carded and cleaned. In good weather let them have plenty of sunshine and exercise.

Breeding Sows:—Should bring their pigs the latter end of this or first of next month. Keep them well treated and supplied with dry leaves or cut straw for bedding, under cover.

Work Cattle and Horses:—This is a very trying month for work-beasts, and they should be carefully attended to, generously fed and watered at regular hours. Give them occasionally, say twice a week, some salt and ashes mixed, and one pint of flaxseed in their oats or ground corn and cob, or oats, and chopt. Corn mixed. Carrots if you have them will be wholesome and much relished by horses. They are apt to become constipated at this season of the year and they should have some laxatives as above suggested to keep their bowels open.

PLASTER AND SALT.

Sow plaster, say I bushel per acre, over the pastures, young grain or grass, and if possible sow three or four bushels of salt on each acre if it was not done last fall or during the present winter.

MANURE.

Save all you can, haul out and spread it as fast as it accumulates, even if it is not well decomposed. Save all your corn cobs, and grind them in your cob mill, fine as you can. Spread them under cover say 4 inches thick, then a layer of stable manure, or rich earth, sods, &c., sprinkle plaster and salt, and ashes, then the same layers repeated until the rick is 4 feet high. Keep the whole damp or moist with liquid voidings from the stables and barn-yard, or with water alone. As soon as fermentation begins, so as the heap becomes warm, turn it over and continue this composting until the whole mass has decomposed, then cover it, dose with rich earth, to be used in the hills or drills of crops.

An intelligent farmer, Mr. W. Beall, of Prince George's county, informs us that last year he while having the moisture evaporated."

ground up his corn cobs in his corn and cob mill. and had the meal or rather ground cobs, applied by handful to a hill of tobacco, and it exceeded his expectations greatly, but it being a bad season for plants and planting tobacco, he failed to plant a piece of rather thin and poor land in tobacco as originally designed. It being well prepared he laid it off for corn about the 1st of July, and had a large handful of this ground cob-meal put in ea ch check The yield astonished him, over 14 barrels or 70 bushels of shelled corn per acre!! So much for the despised corn cobs. Mr. B. says he thinks they will pay in one season for the mill, if used in this way. He grinds cobs and corn together for his mules and cattle, but all the cobs from the corn he shells for meal or for market,—Some 1500 or 2000 bushels a year-he means to grind up and compost as we have suggested above. Hardly too much salt can be used in the compost.

Why should not others follow the example of that enterprising farmer and genial gentlemen in experimenting in many ways and thus turning to useful account many things, like corn cobs, believed to be only fit for fire-kindlings.

Pasture and Feeding Grasses.

J. Sharpless, in the Kentucky Live Stock Records writes as follows:

"Good crops of grass are very desirable to all farmers who depend on dairying or feeding cattle as a specialty, particularly the former. The best and most desirable grass in addition to red clover and timothy is Kentucky blue grass. In order to have the latter in profusion, the ground—properly prepared and well manured and sown with wheat about the middle of September—should be sown with; timothy at the rate of from six to ten quarts of seed per acre, and the following spring an addition of from four to six quarts of red clover per acre. The red clover is the greatest root fertilizer of any of our plants or grasses.

"The roots of a well-set acre of clover contain 185 pounds of nitrogen, 240 pounds of lime, 45 magnesia, 75 potash, 19 soda, 24 sulphur, and 70 of phosphoric acid, on which the timothy and

other grasses are luxuriating.

"The white clover and green grass often have much company, as a great number of grasses may sometimes be occupying the same ground. In low, moist grounds, herd grass or red top, in the absence of good drainage, may be sown to advantage, and in some rare places by very rich soil, orchard grass might meet with favor if thickly sown. In order to make up for a deficiency in the hay crop, the Hungarian grass is a valuable substitute. This grass, if sown in good, well prepared soil, will in about fifty days make two or three tons per acre of excellent hay, if properly cured without rain, that will be eaten greedily by horses and cattle, but should you be so unfortunate as to have it wet once or twice, while curing, its good qualities will be very much impaired; much more so than a crop of timothy, or other grasses, yet all kinds are seriously injured by being wet while having the moisture evaporated."

GARDEN WORK.

GARDEN WORK FOR MARCH.

This month commences active garden work. First of all is to get the ground well manured if it has not already been done - and spaded and raked, or plowed and harrowed, to be in condition for the finishing with hoes, for the reception of seeds Hot-beds to be made and sown with radish, early cabbage, egg plant, lettuce, tomato and pepper seeds. If you can and desire a few early beetssow in another hot-bed, so as to be drawn out when large enough and transplanted to open ground. In same bed can be placed a few sods, 4 inches square and 2 or 3 inches thick, with turf side down; on each can be planted a few lima beans or cucumbers, or melons, and covered with rich earth. They can then be taken up, when the weather permits removal to open ground, and set in the hills without a moment retarding their growth.

Early Peas, such as Alpha, Tom Thumb, Kent or other early pea, can now be sown in open ground, or also, onion seeds and sets, beets, carrots, parsnips, salsify, spinach, corn salad, radish' early cabbage, &c., if the land be in order.

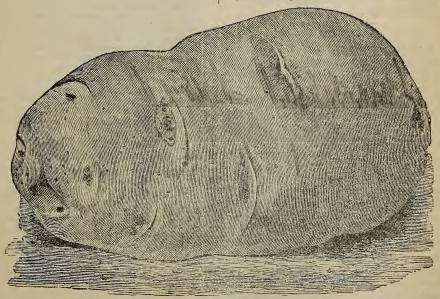
Corn - early corn - sweet corn, can be planted toward the close of the month.

Asparagus Beds. If you have not a sufficient supply, make several beds, at once, and follow the directions given in another column of this number of the THE FARMER. This vegetable is wholesome and one which everybody likes, and should be in plenty, daily, on every table, from March to July.

Cabbage. In sowing Early York, or other sorts for very early cabbage, a sort like Winningstadt for early fall use should be sown in a well prepared bed, and it would be well to sow a small bed of Flat Dutch, but which really is best for a winter cabbage and ought to be sown in May to set out in July and August.



We give a nice illustration of this fine and very popular cabbage.



deep, cut or uncut, the first 6 to 10 inches apart | well rotted manure, hogs-hair or fine-cut tobacco

Potatoes. These should be planted as early as and the uncut 12 to 15 inches apart, and when possible in rich, well-manured soil, 6 or 8 inches placed in the drill sprinkled with ashes, lime or stalks, with a little plaster. The Early Rose is the great favorite now, but new varieties should be tried each year and properly experimented with, as it is certain no one variety lasts many years, as attested by every variety introduced since the old Mercer revolutionized the potato crop. We give a cut of the last thing out, with a description furnished by Messrs, Thorburn & Co.:

BEAUTY OF HEBRON POTATO.

"This valuable Potato originated in 1874 from seed balls of the Chili-Red. The vines and leaves strongly resemble those of the Early Rose, only more vigorous. The plants appear above ground very shortly after planting, and grow with great rapidity, outstripping all other varieties in strength of growth and luxuriance of foliage. The tubers, shaped like those of the Early Rose, are very smooth, slightly tinged with pink around the eyes, but attain a pure white color during the Winter, The tubers lying Their yield is really enormous. closely together in the hills, the labor of digging them is but slight. In point of earliness, it may be ranked as ripening at least twelve days earlier than the Snow Flake, and no less than three or four days ahead of the Early Rose. For culinary purposes its mealy qualities and richness and delicacy of flavor give it a precedence before all other varieties. Contrary to what is usually the case in all large specimens of potatoes, the Beauty of Hebron almost invariably proves sound and solid to the core."

Utilize the Bones.

I never throw bones away, but on the contrary gather all I can find scattered about, and purchase all I can get, to manufacture into a fertilizer. The process is very simple and inexpensive. Take a strong, tight barrel, or a large box constructed for the purpose, and place a covering in the bottom of about four inehes of unleached ashes. Upon this place a layer of bones as close as they can be packed together, and then cover with unleached ashes so as to hide the bones completely, when another layer of bones can be placed, and thus alternate ashes and bones until the vessel is filled. If the vessel is very large, water should be poured in when every four or five layers are on; but with a common barrel it is sufficient to pour in a couple of pailfuls when the barrel is full; or, better still, place the vessel out in the yard, where it will get sufficient moisture from occasional showers. kept under cover, water has to be supplied in very small quantities, sufficient to keep the mass moist Leave the vessel thus all winter, and in the spring it will be found that the bones are dissolved, I

empty the mixture out, and add hen manure for my onion bed, or decomposed grasses and weeds. or stable manure, for other vegetables.—Exchange,

For the Maryland Farmer.

Vinegar from Sugar Beets.

One bushel of sugar beets properly rasped and pressed, will yield five gallons of juice, which, treated the same as cider is, will make a stronger vinegar, of as good, but different flavor; and in making cider, nine bushels of apples and one of sugar beets will make a cider superior to apples alone. Every farmer can raise sugar beets, and with the juice expressed at the cider mill make all the vinegar he wants for his own use and have a surplus for sale. With vinegar at a price it could be made for from beets, its consumption would be increased, as it would enter into many articles of manufacture from which the price now precludes it. When it is found how cheap sugar beets can be raised, and their value for vinegar as well as food for stock, they will be grown more.

The best juice can also be worked into sugar as easily as maple sugar now is, and requires no more skill.

ANDREW H. WARD,
Bridgewater, Mass.

The above will be read with much interest, as it starts some new ideas as to the use of sugar beets, and the ease and simplicity by which they can be made into vinegar and sugar at home, and by every family. The conversion of beets into sugar has become an immense business in portion of Europe and in the United States. What the maple is to the thousands of our Western people, the beet may become to every household in the land, and if once generally used in this way, who can estimate the enormous expense saved in the aggregate to the country, at such trifling cost of production. It will be a new industry yielding an immense revenue to the people, and giving light employment to thousands who are now idle, for the want of something to do. by which they can earn a livelihood.

BALTIMORE DOGS FOR ST. LOUIS.— The St. Louis bench show for dogs opens on Tuesday, February 19th. The Baltimore Kennel Club, of which J. Addison Smith is president, and Mr. L. R. Cassard secretary, sent thirty-three dogs to the exhibition. The dogs, which embrace 'pointers, setters, and Chesapeake Bay dogs, were brought in from the kennel at Hanover Switch and placed in a car provided and fitted up especially for their use, with stalls and every other convenience to make the trip comfortable. Mr. Smite accompanied them to St. Louis.

A new horse-breeders' association has been organized at Springfield, Mass.

Live Stock Register.



For the Maryland Farmer.

Sheep Breeding and Feeding.

Messrs. Editors - The system now adopted by our farmers is to buy common ewes, put with them a common buck, in the following Spring sell the lambs and fleeces, in the Fall sell the ewes and lay in a new supply. This makes a good percentage on the outlay, but it takes many months, a considerable time to make a small sum. My opinion is they can be made more profitable by having the lambs to come in January, and as soon as strong enough, put a pen under the shelter, so arranged that the lambs alone could get in, and feed them on meal in a trough in the middle - very little would do; they would grow and fatten and command high prices of an early market. Again, in laying in ewes, select young ewes, in June or July wean the lambs, put the ewes on a thin pasture to dry up, then instead of selling, put them on a good pasture, and when in a thriving condition, whether fat or poor, put a buck with them and they will be likely to produce many twins. I consider it more profitable to keep over the ewes for another set of lambs, until advancing in age, say 4 years, as they will get for them very little if any more than they will have to give for a new set out of a drove, and they will find drove sheep, that have traveled, will not profit so well in lambs or fatten so well as mutton under 12 months. If bred to an improved buck it would be best to save the best ewe lambs to build up an improved stock for mutton. an excellent farmer to purchase the tail-end of a very large drove, very inferior, I think for 75 cents each ;-he bought a large buck for them; the ewe lambs he saved, in proper time he bought a costly buck for them; the ewe lambs of that set he sold for \$25 each. I never sold my yearling muttons under \$10 each, the butcher sold their saddles at \$35 each; their wool amply paid their keep. I have sold them much higher. Their droppings rich like calves. Some of my sheep -dressed muttons - weighed 235 lbs., 198 and 196 nett; to accomplish this the improvement must be kept up. But I am occupying too much your space unprofitably. Your older readers

will know as much or more on the subject than I do; the younger will not receive instruction from old fogies, but must buy their experience.

J. W. WARE, Berryville, Va.

Feb, 8th, 1878.

[In the last number of the FARMER, in "Winter Care of Sheep," our venerable correspondent is made to say "when they get to the ground they are subject to stretches"; it should have been when they can not get to the ground. This is

are subject to stretches"; it should have been when they can not get to the ground. This is an important difference, hence our correction. We trust the Colonel will live long to enlighten our readers, and for many years enjoy the twilight of a well-spent life.—ED, MD, FARMER.]

For the Maryland Farmer.

The Management of Sheep.

It was an old Spanish maxim that "the hoof of the sheep was gold to the soil"; intending to show the value of the sheep to the farmer in enriching or improving his soil. It is to be regretted that some portions of our country, where formerly sheep raising was an important industry, dogs have increased at so rapid a rate that sheep culture is almost entirely abandoned. In this the loss is two-fold; in that pasture lands have deteriorated, and also the source of revenue from wool and mutton. One condition of success in sheep raising is, good fences that will confine the animals in such enclosures as they are placed. The sheep is by nature somewhat predatory in its habits if unrestrained, and the encouragement of this tendency would be likely to result in loss. ever, they are provided with an ample area of pasturage, their quiet enjoyment of this privilege is very marked. They are by no means particular regarding their pasturage, and on the whole prefer such as presents a variety of feed, and are by no means averse to weeds, bushes and briars; in fact! in this respect, they are sometimes regarded as the scavengers of the farm, and as proof that they are such, one has only to compare fields on which sheep are kept with those adjoining in which none have been pastured. We have observed such cases where, in the former, all brush and briars were wanting to show a similarity to the latter, Then, again, the question of fertility is one of importance, and should receive careful consideration. The sheep, except when at rest, is usually upon the move; it also possesses the peculiarity of making very frequent evacuations of both urine and fecal matter, whereby fertility is more evenly distributed than by means of any other animal, which probably explains the reason of hurdling practised by the English husbandmen, and which is sometimes practised in this country by means of

moveable fences. Another point, too, is to be considered. The frequent tendency of frost on the ground is to lift the grass roots, and unless these are again compacted in the soil, the result is injury to the grass crop; in meadow or mowing lands this can be remedied by the use of the roller, but few farmers will spend the time to operate upon their pastures ;-but with a flock of sheep passing continually over the field, similar results are produced without any expenditure of labor or time on the part of the farmer. Again, soils inclined to be loose and sandy are by this means of compacting very much improved. Then, as to the fertilizing, our observation has been sufficient to satisfy us upon that point; and we have been shown fields of most excellent pasturage laying side by side with that which was poor, and yet the condition of the former was owing wholly to the keeping Where properly confined, but little care is necessary during the summer season further than an occasional salting and a watch for disease or dogs.

The winter management requires more attention. There is no animal that is more disastronsly affected by cold storms of rain than sheep, and it is sometimes a matter of economy that the pasture should be provided with a bush swamp or groups of evergreen trees, where even in summer they can seek a partial shelter.

As soon as the cold rains begin in the fall, the flock should be brought to the barn, or near by where they can be sheltered. They should be supplied with ample stable room that is well enclosed and warm, provided with feeding racks for hay, grain and roots.

In warm weather, and even in pleasant weather of a low degree of temperature, the sheep prefers the open air, and takes much satisfaction in eating the refuse of other animals. Sheep will usually do well enough on good hay up to a little time before lambing, It is important, in point of profit, that the coupling should be regulated so as to bring the lambing season early in the year; some prefer the month of January, so that lambs will be well developed at the time of turning out to grass. In order to maintain the health of the flock, it is well to give, in addition to hay, an occasional feeding of roots, cut up so as to be readily eaten; and before lambing as well as after, a frequent feeding of a small quantity of grain, corn, oats, barley, of beans and peas should be attended to,

The greatest attention is required at the season of lambing, because if the weather is cold the young lamb is likely to become chilled and die. We have seen a very fine arrangement for this

season, which consisted of a warm stable. with a southern exposure and well lighted, which was denominated the hospital. This was subdivided into little pens four feet square, provided with a little feed box, and into which weak or sickly sheep were placed away from the dangers attending being with the flock; and when any sheep gave signs of lamb birth, she too was placed in the hospital ward and so was in a safe position and the lamb could easily find its nurse. With several of these stalls or boxes, even with a considerable flock of sheep, much anxiety can be avoided. After lambs get a little age, they should be encouraged to eat grain and hay, and for this purpose aftermath is especially adapted. In spring, too much haste in turning to pasture should be avoided also care in shearing time - for a cold storm and exposure at such time will frequently tend to a fearful depletion of the flock.

Like other departments of agriculture, care mnst be exercised. WM. H. YEOMANS.

Columbia, Conn.

FOOD ELEMENTS.

The nitrogeneous and carbonaceous elements in food represent, respectively, the flesh-forming and fat forming materials. The following table shows the per cent. contained in a variety of plants, roots; grains, &c. The feeder, from this may gain valuable information. Oats contain those substances in about their proper proportion for growing animals, and corn for fattening animals, when fed with a proper allowance of good hay. From the per centage given below, the feeder may easily supplement the proper food to realize results, whether for making flesh, fat or milk; the albuminoids representing flesh, and the carbohydrates representing fat-formers.

Albuminoids. Carbo-hydrates Best Hay 8.5 43 Swale hay 3.5 35 Oat straw 3. 38 Wheat straw 2. 40 Bean straw Io. 33 Corn fodder, dry 3. 30 Clover 13.5 30 Pea straw 6.5 55 68 Corn 10 Oats 12. 60 Barley 66 9. Pumpkins 1.2 3 Potatoes 2. 21 Turnips r. 5 Mangolds I.I 9.1 Sugar beets I. 15. Bran 50 Linseed cake 28. 41 Cotton seed cake 17 -Prairie Farmer.

The Alderney Breed of Cattle.

This Channel Island breed of cattle, popularly known in England as "Alderneys." consists of two classes of the same breed. The Guernsey is the larger of the two, usually of a light fawn color, patched with white. The Jersey class is smaller, and the popular is a dark or "dun"-deer. In the United States the name Alderney is no longer in general use, but each class is called simply Jersey or Guernsey as the case may be.

The best English authority now admit that the Alderneys were descended from some Swiss mountain breeds, of which many fine specimens have been exhibited at live-stock shows in Paris—dark and light fawn in color, and fine in head and horn Others have contended, without tenable grounds that the Alderneys were an off shoot of the Normandy breed, or of the Ayrshires; but there is no semblance that the true ancestors of the Ayrshires were Danish.

In England, where the principles of selection have been so thoroughly and patiently investigated and applied to cattle and sheep, and where the elements of animal food and growth have been closely studied, finer specimens of the Alderney have been produced than in their native Islands, Amongst the most successful English beeders. Mr. Phillip Dauncey of Horwood, has occupied the most distinguished position. For nearly half a century he devoted his attention to obtaining great milking qualities, symmetry, constitution, a l a uniform fawn color, without white. When in 1867, Mr. Dauncey retired from stock rearing, on account of his advanced age, his sixty-nine cows and heifers brought him \$16,425, or an average of \$238 for each animal. His cow "Landscape," sold for \$500; and his heifer, "Ban," for nearly the same amount. Walter Gilbey was a purchaser at that sale.

Whole-colored Alderneys, whether dark or light fawn, are most esteemed. Good breeders obtain average annual returns from 220 to 240 pounds of butter per cow, which command higher prices from those who are able and determined to have the best of everything. The Alderney breeder is satisfied with an animal almost equal in elegance to a deer, rich in cream, and bountiful in butter of the finest quality; but success has not yet been obtained in combining meat producing with the other desirable qualities.

The Alderneys imported direct from their native homes are rather delicate, and require slight shelter in the cold weather and special care after first calving, but they soon become inured to a

change of climate. The Alderney becomes less sightly as it reaches old age. It is most pleasing to the eye as a yearling, or two-year old, whilst the productive milkers finally become thin and misshappen. In the United States this breed, or rather the better known classes of Jersey and Guernsey, and especially the former, are having a decided influence in the enrichment of the dairy product wherever they have been introduced, and an increased demand has arisen for animals of this valuable breed.—American Cultivator.

American Meat for Johnny Bull. THE IMMENSE PROPORTIONS THE TRADE HAS ASSUMED.

The largest quantity, both of fresh beef and mutton, that has ever arrived at Liverpool from America in a single week was landed the fifth January. It consisted of 9,112 quarters of beef and 1,461 carcasses of mutton, the whole going from New York and Philadelphia. There also arrived 50 dead pigs und 70 live ones, the latter being the only live stock landed.

During the past three months there have been landed at Liverpool exclusively American meats, 48,024 quarters and 1,569 sides of beef. 4,037 carcasses of mutton, 25 carcasses of pigs, 6,614 packages and 213 firkins of fresh butter; and 1,322 live cattle, 4,311 sheep and 357pigs; against 17,648 quarters and 646 sides of beef, 616 carcasses of mutton 50 carcasses of pigs, 20,814 packages, 3,152 tubs and 106 firkins of fresh butter, and 4,419 live cattle, 197 sheep and 119 pigs in the previous quarter. Total exports to England for the half year just ended are 65,672 quarters and 2,215 sides of beef, 4,653 carcasses of mutton, 75 carcasses of pigs, 27,428 packages, 3 152 tubs and 349 firkins of fresh butter, 5,741 live cattle, 4,508 sheep and 476 pigs. The price of American beef has fallen since last year from 6½d and 7d to 5d and 5½d per pound.—Rural Sun.

Horses Constantly Stabled.

Horses that are kept in the stable all the year through, and especially when they have no change or variety of food, but only hay and oats, are very apt to get indigestion, or derangement of the stomach or bowels, in the form of want of appetite, feverishness, quick breathing, colic, gnawing of old wood, &c., &c. When a horse falls off in flesh, or in appetite, or has any of the above symptoms, the most natural and simple mode of management is to change his food, as by giving him roots, or corn stalks, or green fodder, or turning him through the day to grass. When the bad symptoms do not

yield to the employment of some such change of diet, the next best thing to do, would be to make use of the following powders, which have been prescribed by Dr. Dadd for a case of this kind, with a view to the restoration of the vigor of the digestive organs. Take of

Powdere	d Genitian	I ounce
do	Ginger	1 "
do	Salt	2 "
do	Charcoal	I "

Mix thoroughly and divide into eight equal parts. Give one with food night and morning.

Give Us a Breed of Walking Horses.

What use are fast horses to farmers? Can they put them to work in the plow, harrow, cultivator, roller, reaping machine, cart or wagon? No. A storm might arise and the whole crop of hay be ruined if they had to depend on 2:40 horses to haul it in. There is but one use that we can see that a farmer might put them to - sending for a doctor; but as farmers have very little occasion for this professional gentleman, and never get very sick, a slower and surer horse will answer better. Why then parade these horses at the head of the lists at Agricultural Fairs, and give them the No wonder our practical biggest premiums? farmers complain of this, while there is no premium at all for walking horses, which are a thousand times more useful - we mean to the farmer and for general agricultural and industrial purposes. Thoroughbred horses have their uses, and we do not desire to utter a word against them, but many good words in their favor. They, however, must fill their own places, and work-horses theirs; and neither should be advocated to the exclusion of the other. Both should be recognized according to their value.

[We take the above from the Germantown Telegraph, and it is a matter worthy of serious notice. Fast walking horses are needed far more than fast trotting horses, and yet no attention is paid to breeding them. More than one-half of the horses are used for walking, and, for the work they do, a fast walker is worth donble that of a slow one.—
Ed. Progress.]

Any good breed of trotting horses, or which has thoroughbred blood in its veins, can, by practice, be made to walk fast. No common-bred slouch can be made a fast walker, A fast walker is made by careful exercise in that gait, and it is a delightful one for a traveler if his steed walks 4 or 5 miles an hour. It is also very important to the farmer to have a fast walking team. But it depends much on the rider or driver whether a horse ever attains this highly esteemed quality.—Eds. Mary-tand Farmer.

Experiments at Cornell University.

From the record of experiments by Professor La Zenby, at Cornell University, N. Y., upon germination and fertilization, we find the following;

"During the winter an experiment was conducted to test the effect of certain compounds in the germination of seeds. Seeds were kept at an average temperature of 65 degrees, moist with pure water, iodine water, bromide water, chlorine water, and camphor water. The effects were carefully noted. The results, although variable, were very interesting. Certain seeds, moistened with pure water, would germinate in from forty to fortyeight hours; moistened with bromide water, thirty to thirty-six hours, while iodine water caused them to germinate twenty four hours. Chlorine and camphorated waters had a marked stimulative effect, especially upon cruciferous seeds that had lost a portion of their vitality through age. That this effect was merely stimulative would appear from the fact that seeds which contained but little nutriment, were harmed rather than benefitted by the application.

To show the practical bearing of the experiments, I might state that of some old turnip seed, which I wished to sow in the garden, I found that not over 80-1000 germinated. The greater portion of the seed was then treated with camphorated water, dried by rolling in plaster, and then so wn. The seed thus treated germinated finely so that in three days I was able to trace row. The portion planted without this application did not come up for a long time, and then very thinly.—The success of the crop was due to the treatment

of the seeds.

Science Loses the Hog.

HODGINS, THE CHAMPION, AND SMITH, OF CORONA, NOWHERE.

The hog at whose weight people have been guessing in the New American Museum during the past week, was led up Forty-first street and slaughtered, yesterday. Over two thousand ballots had been deposited by guessers, and the guesses ranged from 143 to 1,999 pounds. About one hundred and fifty persons went to the slaughter house to see the killing and weighing. The hog was too vast to walk up the inclined board to the room in which the butchers usually work, and a butcher had to go down and kill him in the yard. It took six men to roll the animal over on its back. Stokes, the chief butcher to Stahinecker & Sons, despatched the hog. After it was dressed and cleaned, it was found to weigh precisely 759 pounds. A man from New Jersey had deposited the only ballot whose number corresponded to this, and he got the carcass. Hodgins, the champion hog-guesser of Westchester, had guessed 683 pounds, and Smith, of Corona, champion of Long Island, had guessed 625 pounds. Both were much chagrined at the result.—N. Y. World.

Need of a National Institution for Instruction in Veterinary Science.

The National Live-Stock Journal calls attention to the increasing number of bogus diplomas purporting to issue from the Veterinary College of Philadelphia and the Boston Veterinary Institute, both schools presided over by men who had no regular veterinary degrees. These diplomas are sold, some as low as \$10, to any applicant without any consideration as qualifications. To prevent these frauds and the tremendous amount of injury wrought by these itinerant, ignorant quacks, this excellent Journal suggests that it is of the utmost importance to have established by a liberal endowment from Congress, a National Veterinary College, in which suggestion we fully and heartily concur.

The article we have referred to, thus discusses this proposition:—

A veterinary college requires a body of trustees whose position shall be a guarantee of good faith -such an oversight, in fact, as is now given to our State agricultural colleges. It requires a faculty whose attainments are guaranteed, not only by public confidence, but by the possession of the degree of one of the best existing veterinary colleges. It requires that all candidates for admission shall submit to an entrance examination, to test whether they have the requisite education to enable them to undertake the professional studies with advantage. It requires that a very full course of study within its walls shall be pursued before a candidate can present himself for examination in order to the obtaining of a degree It requires that degrees shall only be awarded after a satisfactory examination, at a designated time and place, by a board of examiners, apart from the faculty of the college. It requires. finally, a sufficient endowment, so that it may be fully furnished with all the necessary appliances for rendering the instruction lucid and thorough, and to guard against the constant temptation in medical schools-to crowd in numbers, and graduate them at the earliest possible moment, that the salaries may be increased.

The establishing of such an institution would very fitly come from the General Government. By the land-scrip grants, every State has been supplied with the means of carrying on an agricultural and mechanical college; but, in the midst of all this, the vast interests that centre in our live stock and their diseases have been almost entirely ignored. No country in Europe, excepting Prussia, at all approaches us in the numbers of its live stock, and yet no civilized land so utterly ignores the need of veterinary care. The following table,

giving the numbers of the four principal classes of live stock in the United States and in two of the foremost countries of Europe, will illustrate this:

And the second s	Horses and Mules. Sheep. Swine.	United States (1875) 11.149,800 27,870,700 35,915,300 25,726,800 Prussia (1867) 2,313,817 7,996,828 22,262,087 4,875,114	:	2,726,739 6,115,491 30,313.941 2,422,832	
	and Mules.	11,149,800 27	3,352,231	2,790,851	
	Horses	United States (1875) Prussia (1867)	" (1877) Great Britain and	Ireland (1874)	

It will be seen that we bear the palm for numbers of all kinds of live stock. In sheep alone do they approach us, though even in these they leave us a magnificent lead. In all others we exceed them by three, four, and even five times. What, then, are the relative precautions we have adopted for the preservation of this splendid array of wealth? Prussia, with a little over a third of our live stock, has five veterinary coileges-at Berlin, Stuttgart, Dresden, Hanover, and Munich-maintained at State expense, and furnished with ample subjects and pecuniary assistance for experimental investigation, when judged necessary. England, with less than half the number of our live stock, has four veterinary colleges-one in London, two in Edinburgh, and one in Glascow-all independent of government aid, being either simple personal ventures, assisted by agricultural societies, or as in the case of the old Edinburgh College, maintained by private endowment. One effect of this divorce of State and veterinary college may be seen in the result of the recent outbreak of rinderpest which, in Prussia, was promptly extinguished within a week; whereas in England it smouldered for months before a committee of the House of Commons had time to fully consider what ought to be done. In the former outbreak, of 1865, for which England was still less prepared, the disease was allowed to increase for six months, and finally to carry off 17,000 head of cattle per week, before efficient measures for its extinction could be inaugurated. On that occasion England lost over \$40,000,000 in the space of eighteen months.

Some authority ought to be vested in the executive department of our Government by virtue of which active measures may be taken to extinguish animal plagues when occasion requires. As well appoint a commissioner to deliberate as to whether the striking of matches in a powder magazine should be permitted to continue; or take a vote of the passengers as to whether the engine should be reversed and the brakes applied when the danger signal is already shining ahead, as wait for congressional deliberation when a plague is suddenly brought into our midst. But the Government, as such in not acquainted with the nature of the danger, nor the best methods of meeting it, and hence the great value of a national veterinary college, which can advise and control in such a matter.

The veriest fraction of the \$20,000,000 lost last year by hog cholera, would have sufficiently endowed a veterinary college and experiment station, which would have paid the country a thousand times over in substantial results. In making any such movement, the great thing to be guarded against is, the squandering of resources. Many conceive that the end is sufficiently met by establishing a veterinary chair in each State agricultural college. A recent writer in the Philadelphia Press, after justly exposing the dangers of private veterinary schools, and calling attention to the need of sound veterinary education, concludes by asking Government to "establish a professorship at West Point, and educate a class of veterinarians, one of whom should be attached to each regiment of cavalry." Why not also endow a medical professorship at West Point to fnrnish physicians for army? Surely if the medicine and surgery of half a dozen different genera of animals can be taught successfully by one professor, that of one - the genus homo-may be with equal success! To state the proposition is to show its absurdity. veterinary student must go over similar ground, in every respect, with the medical student; but he must go over this in its application to solipeds, ruminants, swine, rodents, carnivora, and land and aquatic birds; and yet, while the medical college boasts from ten to twenty chairs, the veterinary is to be circumscribed by one solitary professor, attached to an agricultural or military institution. The veterinary teacher may feel complimented by this estimate of his powers, but few would care to undertake the load of responsibility thrown upon him.

If Government can undertake the establishing of a veterinary college, with a sufficiently extended curriculum to make it worthy of the name, it will prove an excellent investment if properly officered and furnished; but no such good can ever be expected from the endowment of fifty separate professorships, each in a different institution, and each expected to turn out veterinarians. This would be the most efficient way to make the teaching superficial and imperfect, and to destroy the very possibility of observation, experiment and progress. Let us, if we can, have a national veterinary college; but do not let us squander our means on a host of isolated chairs which can never fill the existing void; and the creation of which will only postpone indefinitely that concentrated and efficient work by which the permanent protection of live stock may be the better assured.

LIME IN SOIL.

The total quantity of lime taken up from the soil of an acre by an average corn crop of 50 bushels of 60 lbs. to the bushel, and 6,000 lbs. of stover would not exceed 25 lbs. A good crop of clover, 5,000 lbs of hay in two cuts would require about 120 lbs' of lime. A crop of wheat of 25 bushels with 2,500 lbs. of straw would not require more than 10 lbs. A fair crop of potatoes, 9,000 lbs. or 150 bushels at 60 lbs. to the bushel, would not need more than 3 lbs. A crop 20,000 lbs. of beets only 7 lbs. and of 3,000 lbs. of timothy hay about 34 lbs. of lime. When we look a little further into the matter and see how small a portion of this lime is actually exported from the farm in the crops ordinarily sold, and how large a proportion goes back to the soil from which it came, in the manure, the little need of taking pains to supply lime to plants for food will become still more plainly apparent. On any well managed farm the hay is usually all eaten by the stock, so that none of the lime in that part of the produce of the farm is exported; what little is retained by the young growing animals for the production of bone substance is more than made good by the lime in the water which the animals drink; in cases where a careful comparison has been made between the composition of the manure of a mixed herd of cattle, more lime has been found in the total manure than in the total fodder supplied, and this excess could have been derived from no other source than the water. The lime in th clover and timothy is not then lost to the farm, if the manure is cared for in any decent manner; the same is true of the wheat and other straws, of the corn-stalks and the roots. But in the acre's yield of Indian corn, taking the grain alone, there are only about two pounds of lime, and in the wheat but little more than one pound. In the other cereal grains we should have similar insignificant quantities of lime; and even if the potatoes are sold off the farm, as is often the case to a large extent, the stock of lime in the soil of every acre producing potatoes is diminished to the extent of only three pounds. At these rates of demand it would take a long time to make much impression on the reserve supplies of lime in the soil, when such reserves amount to from 1,600 to 2,000 lbs.—Professor Caldwell, before the Elmira (N. Y.) Jarmers' Club.

NORTHEAST GEORGIA.

BY JAMES T. POWELL.

WATER POWERS.

Our water powers are, perhaps, unsurpassed by those of any other section of our country. In fact, as we have frequently heard it remarked, the greatest difficulty about the water powers of Northeast Georgia is, that we have too much for our own advantage. In each of the counties of which it is composed, there are numerous rivers and creeks, on almost every one of which there is a sufficient amount of available water power for the running of any kind of machinery. To enumerate them all, would make this letter too long for an ordinary newspaper article. Suffice it to say, that our water powers our almost unlimited. And although we now have, in several of our counties, machinery of some kind, in successful operation, such as cotton factories, paper mills, woolen mills, etc., we have plenty of room and water power for numbers of others, which have and always will prove a profitable investment of capital,

BUILDING MATERIALS AND MINERALS.

Northeast Georgia belongs to what is known to geologists as a metamorphic region, and the rocks and minerals are those generally found in this climate, But our object being to convey a correct idea of the country, not to geologists, but to the people generally, we will go a little more into detail, giving some of the principal useful rocks and minerals.

We have, in all sections of Northeast Georgia, an abundance of excellent clay, for bricks. We also have an endless quantity of granite, gneiss and schist. Gneiss is somewhat similar to granite, except that it is found in layers, while granite occurs in masses. Schist is a kind of a rock found in thin layers, and contains considerable quantities of fine mica or isinglass, as well as gold quartz. Granite and gneiss are the rocks principally used for building purposes. They are easily accessible in any portion of our section. Our gneiss varies in color, some being dark and some light colored. Our granite is a light gray and easily worked. There is a bluish granite in some of our counties, that is susceptible of a very high finish, though not so easily worked as the gray.

We have, in this section, iron, copper, silver and gold. We do not think the iron will ever amount to a great deal, though furnaces have been built, and iron ore produced. There are now several copper and silver mines in successful operation, and we have no doubt that, at no distant day, they

will be worked at great profit in this portion of our State. Gold is the valuable metal which has hitherto, and will in the future, be our greatest mineral wealth. In Lumpkin, Dawson, White, Rabun, Habersham and Hall counties, there are vast quantities of this precious metal. It is also found in other counties, but not in such quantities as in those named. In White and Lumpkin there are, at present, the largest gold mines in this State, being worked according to the most approved plans, "panning out" what are called good wages, amounting to from one to five dollars a day. We have heard several good geologists say, that the gold fields of this section, properly worked, would be unsurpassed. Next in importance, are our asbestos and mica mines. There are large deposits of asbestos in this portion of the State, which are just now beginning to be opened up and worked. This will, in time, become one of our greatest industries. Mica is also found in considerable quantities, though it has not, as yet, been worked to any considerable extent.

Besides these, we have many precious stones. The diamond, ruby, topaz, garnet, amethyst and others, have been found in some of our counties. The diamond in Hall and Habersham counties, the ruby in Towns, the topaz in Lumpkin, and garnet and amethyst in nearly all of our mountain counties.

LABORERS.

Good laborers, of all kinds, can always find constant employment, at good wages, in this section, particularly farm laborers, of which there is at present a great scarcity. They can live cheaply, and at the wages paid, can always "lay up something for a rainy day."

TAXES.

Our taxes are not high; in fact, they are much lower than the taxes of many of the other States. A poll tax of one dollar per head, for educational purposes, is required of each male citizen, an ad valorem tax for county and municipal purposes, and a very low State tax.

LANDS.

We have an abundance of good lands, consisting of mountain sides and broken lands, up lands, and botton lands, level, hilly and valley lands. In fact, we have such a variety of lands in our section, that we are satisfied we can suit the tastes of all, no matter for what purposes they may require.

PRICES OF LANDS.

Lands can be bought at various prices. Unimproved lands may be had at from \$1 to \$5 per acre, while improved lands can be bought at from \$5 to \$25 per acre, according to quality and location' They can be bought at low figures for cash, or on reasonable terms.

RAILROADS.

The Athens branch of the Georgia Railroad, the Northeastern Railroad, and the Atlanta and Charlotte Air-line Railroad, traverse the larger portion of Northeast Georgia, thus affording an easy, quick and cheap means of access to the principal markets of the country. It is only about 5 hours ride from almost any portion of the country to Atlanta Ga., 24 hours to Charleston, S. C., 36 hours to St. Louis, or 36 hours to New York, so that the most delicate fruits, vegetables or meats may be in these markets before they will have time to be injured by transportation.

Subsoil Draining.

We recommend to our readers the perusal of the following sensible article on a subject of vastly more importance than our Middle and Southern State farmers seem to attach to it.

Without claiming to introduce any new ideas, a few practical suggestions are herewith given for the benefit of the agriculturist and others interested in the dreining of the lands.

The principles of draining and irrigating lands were well understood by the ancients, who were very successful in reclaiming cold, unproductive tracts, and evidently understood the chemical effects of water and air on the different varieties of soils. All clay soils in their natural state are impervious to water and effectually closed to the beneficent action of the atmosphere. Clay will become saturated with water, which it retains and holds, the fine, tenacious particles producing with water a slimy, ductile paste which is inimical to vegetation The water of storms passes over tracts of this character carrying off with it the ammonia and other fertilizing salts, or depositing them in depressions where they are subjected to the slow process of evaporation, leaving behind a fine sediment that fills the cells of the soil so that air cannot penetrate Under such circumstances a portion of the seed will decay, and what germinates will remain dormant. Finally, the soil becomes hard and the surface shrinks, producing cracks, breaking and tearing the frail roots of vegetation, and causing them to wither before maturity.

Chemistry teaches us that cold passes downward while heat rises. Water in a test tube may be made to boil on the surface while remaining cool at the bottom. So wet land is warmer when shaded than when exposed to the evaporating power

of the sun, which produces the same effect on the soil by evaporation as that of cooling liquids in bottles or jars by evaporating the moisture from a cloth in which they may be enveloped. Thus it will be seen that not even the rays of the sun can warm permanently wet land, but they produce an opposite effect, the difference in temperature between undrained clay soil and that which has been drained being about six and a half degrees Fahrenheit against undrained soil; corresponding to an elevation of 1,950 feet above the sea level.

Deep draining overcomes these obstacles to fertility, and the land becomes pervious to the action of frost and the moisture of the atmosphere. Soils well drained are made ready for cultivation much earlier in the season than when left to accumulate and hold the water of a winter's storms, and the labor of cultivation is greatly reduced. Low-lying meadows adjacent to high lands are frequently left untilled because of their sour, cold character. Under a system of deep draining these might be rendered the most productive portions of the farm, as, when the soil was mellowed by drawing off its superfluous water, it would retain in its pores and minute channels the nutritious elements brought down by the rains from the high grounds adjacent. On pervious and deep drained lands the roots of vegetation have room to grow, drawing up supplies of vitality from depths far below the limit of the plough. Those soils which permit the surface water to descend are best adapted to withstand long droughts. The rains of the summer season are warmed by coming in contact with the heated surface soil, and this warm water percolates downward, equalizing the temperature by cooling the surface and warming the subsoil, giving new life and strength to vegetation, enabling it to stand erect under the glare of the returning sun, as a brigade on review before its commander. Well drained land will denote a difference between summer and winter of from thirty to forty degrees, but saturated soil shows a difference of only six to ten degrees. It is quite evident, therefore, that the drained soil will receive much greater benefits from the upheaving and pulverizing action of the frost than the undrained and water saturated soil can. But shallow draining is but labor and money lost. Getting the water out of sight and giving the roots of vegetation a cold bath is not intelligent farming. In the various periodical agricultural reports may be seen the records of experience of those who have tested deep draining; tried shallow draining, or do not drain at all. Those who drain deep receive good crops every year whether, wet or dry, and sometimes the increased crop pays the expenses of draining. Shallow draining is no defense against drouth. Those who denounce draining are generally firm believers in "whatever is right" and admire the luxurious spontaneous growth of bullrushes and cattails.

The system of farming that includes deep drainage not only gives vitality to the soil and vegetation, but increases the health and prolongs the life of mankind. Deep draining is a serviceable agent in the prevention of malarial diseases, as fever and ague, neuralgia, diptheria, influenza, tic doloreaux typhoid fever, cholera, rheumatism, consumption, etc. It prevents diseases also in another way Water' continually seeks new channels, percolating through the under soil into any excavation that may be near. Thus wells become contaminated with animal, vegetable and even mineral poisons, the drainage of cess pools, sinks, drains, and barn yards, the extracts of decaying vegetation and animal remains. Deep draining in the vicinity of the house may avert the terrors of death and the troubles of sickness, deemed by some the visitations of divine Providence when they are the results only of their own imprudence.

If the time and money now lost in traveling over and around deep morasses, getting teams out of the mire, repairing harneses, and wearing out cattle, was spent in proper draining, the world would be richer and happier. If land now useless was properly drained, it would yield ten talents for the five given, instead of burying its own talent in the mire. If our agriculturists would seriously make the experiment of deep draining they might find themselves better contented with their lot, and encourage their sons to remain on land that produced good crops every year, instead of roaming the world in search of the fortune that lies buried in their land at home.

H. G. LOOMIS, E. C.

· Forests and Forest Culture.

This interesting and important theme, so admirably discussed in our Journal by our correspondent Geo, May Powell, Esq. has awakened new interest in the minds of all thoughtful men. Mr, Powell is a gentleman of high culture, and a generous supporter of the doctrine, that tree planting has become an absolute necessity; and a duty that this generation owes to its successors in this and every other civilized country in the world.

Mr. Powell has travelled even in foreign lands, to carry out his views and those of other leading minds on this subject, to establish co-operative relations with foreign countries on forest intereststhe saving, as far as possible, the destruction of the forests, and rearing them as fast as necessity requires the removal of trees for any purpose. He has practically exhibited his plans in the wilds of far off Northern Africa, and Western Asia.

He succeeded in inaugurating a work of seedplanting among the peoples of those regions, which has no doubt resulted in planting millions of trees, tree seeds and vines there and which in years to come, will result in many millions more, and be a green living monument for ages, to his enterprise and devotion to his fellow man.

He says he considers "Forest promotion by seed planting," the slogan of the tree planting campaign now opening before our own and other nations. In a note to us, he says, "Forests of fruit trees ought to be planted. All trees are hardier and longer of life, which have never had roots disturbed. Let the apple, peach, pear, orange, and other fruit seeds be planted where the stock is to stand, then graft it there; the tree will be more vigorous and its life will be doubled and often quadrupled."

When he was in the Orient, on the work of the Oriental Topographical Corps, he addressed a memorial, at the request of eminent scientists resident in the Turkish dominions, to the Governor of Palestine through the Prussian Consul at Jerusalem. and through a Scotch physician of Cairo to the Khedive of Egypt. The memorial is at follows:

"That is a beautiful story of a dream of a follower of your prophet, who desired to know if he truly loved God, and learned in the dream that he who proved by the acts of his life that he loved his fellow man might be sure he loved God. In this land none of the temporal gifts of God seem more needed by our fellow-men than trees. These will not only give the fruit they bear on their branches and cool shade on the ground, but, also, health in air, rain from the clouds and beauty to the land. We can give our fellow men these benefits of the tree by planting them, and we can plant fen tree seeds easier than we can dig up one small tree and plant it. In the fatherland of our brethern there is a pleasant custom of every newly-married pair planting two trees. The scientiffc organization which I represent is trying to form the habit among its members and friends who travel or live in Orien tal countries, of planting in them the seeds of the fruits we eat here. If this habit could become general among the people, and also the habit or custom of protecting the young trees by keeping men and animals from injuring them, the good would soon come to the people, and the wealth of your government be very great, We find beetle holes, crevices behind large stones in the shade,

and damp places by water courses good places to plant the seeds; and seeds having firm cases (such as the oak, peach, plum and apricot) good ones to plant. We believe that in many desert places the yellow pine, which grows in sandy portions of the Southern States of North America, also the seeds of nut-bearing trees, of special value to your country. If these words seem good to you, please add such other words to them as in your wisdom shall seem best, and send them to the sheiks of your land. I have thus planted thousands of treeseeds in the Turkish dominions myself, and hope to plant thousands more. You may think it well to offer a prize to the Sheik who plants and protects the greatest number of trees within a halfhour's travel from his village. With great respect I beg to subscribe myself your American friend,

GEO. MAY POWELL,"

Cotton Seed Oil and Oil Cake.

The statement that if "the cotton seed raised annually in the South were utilized, their product would sell for as much as one-fourth of the cotton crop," seems incredible. The following figures, however, will prove the assertion:

There are 4,000,000 bales of cotton raised of 400 hundred pounds each, making 1,600,000,000 pounds of lint cotton. From each bale of cotton there is 800 pounds of seed, making 3,200,000,000 pounds of cotton seed. Reduce the seed to tons and it makes 1,600,000 tons of seed. Each ton of seed will make 32 gallons of very superior oil, and 700 pounds of oil cake.

1,600,000 tons of seed at 32 gallons to the ton will make 51,200,000 gallons oil.

1,600,000 tons of seed at 32 gallons to the ton will make 51,200,000 gallons oil.

1,600,000 tons of seed at 700 pounds to the ton, will make 1,120,000,000 pounds of oil cake. Reduce the cake to tons and it makes 560,000 tons.

The oil is worth 40 cents per gallon and the oil cake \$25 per ton.

51,200,000 gallons oil at 44c.	\$20,480,000
560,000 tons oil cake at \$25,	14,000,000

Total

There is an immense demand for the oil and cake, large quantities of the latter being shipped to Europe. The oil is largely used for many purposes; it makes a superior salad oil, and is used ex-

\$34,480,000

tensively in adulterating other oils. The refuse or residuum is used for making a superior soap. There is sufficient nutriment contained in the cotton seed to feed every milch cow in the United our views on this great question.]

States, to furnish the world with salad oil and have forty millions of gallons to spare, and to make soap enough to supply the entire United States. Nearly all of this is annually lost to the South, as but a small fraction of the seed are now manufac-

COST OF AN OIL MILL.

The following is a statement of the cost of machinery (all new and first-class in every respect) capable of pressing 10,000 pounds per day:

One triple set of presses complete im-

provements-hydraulic pressure,	\$3,500 00
One patent hulling machine,	850 00
One pair of rollers or crushers,	450 00
One set of hair mats and bags,	350 00
Total,	\$5,150 00

Analysis, showing the relative value of different kinds of food:

	Flesh producing.	Fat Producing
Turnips	I,	5
Straw	3.	16
Potatoes		17
Hay	3. 8.	50
Rye	II.	72
Oats	12.	72 63 68
Corn	12.	68
Beans	22.	60
Linseed oil cake		56
Bran and mill st		51
Cotton seed me	al 41.	77

The above shows that for feeding purposes the cotton seed meal is exceedingly valuable. We may expect in future to see a great number of cotton factories at work in the South spinning cotton direct from the seed, and attached to each an oil mill and a soap factory. WM. H. OLIVER, Newbern, N. C.

[The above clipping from an excellent journal of North Carolina, called Newbernian, from its place of publication, Newbern, N. C.; should attract Northern capital. Why should not the millions pounds of cotton seed, now thrown away, be converted into a capital-worth to the South almost as much as the cotton itself is? Why should England fatten her beeves and mutton on the oil and oil cake of American cotton, when our farmers at home neglect it, or in the South, throw it away. Let capital go South and convert the cotton seed into oil and oil cake, and our farmers—all over the land-make beef and mutton out of it, and ship the meat to Europe, retaining the manurial portion in our own land. There are millions in it, if Northern capital will only invest in Southern cotton seed; au revoir, when we will express further

MONEY COINAGE.

As the Silver Bill in Congress is attracting so much notice at present, and as our farmers are to a very great extent interested in it; we feel justified to give the following for their information and reflection. As to ourselves we desire to use, the gold, silver and paper dollar, to be on a perfect equality, That is, let a laborer have the full equivalent of a gold dollar, when paid his wages in silver or paper. This equalization of the different sorts of money would secure plain men, farmers, laborers and others from the exactions that combinations of fraudulent or speculative money change speculators and bankers, they are now subjected to. We think if the silver bill be passed, a man can pay 92 cents (and it must be taken) in full for \$1.00, that he agreed to pay a poor laborer for a days work or for a job. In a word if the Bill passes, and becomes a law, - silver really and intrinsically worth 92 cents, must pass and be legal tender for \$1.00. Every dollar a farmer gets tor his grain, per bushel is to be paid with 92 cents. If he sells a turkey for \$1.00, he is paid in adulterated coin worth really only 92 cents. Farmers think of this?

MATTERS OF INTEREST TO BUSINESS MEN AND THE PEOPLE GENERALLY.

[From the Philadelphia North American.]

The two-cent pieces were abolished five years ago.

There are five times as many one-cent pieces used as threes.

Less than \$10,000 of one-cent pieces were coin-

ed last year.

No fives or threes (nickel) were coined last year

for circulation.

The old-fashioned silver dollar has not been

made for five years.

The shipping of silver coins from the Mint began about a year ago.

Silver is purchased at the Mint to a limited ex-

tent. It is paid for in gold.

Nickel and bronze coins are only made in the

United States Mint, in this city.
The Eastern, Middle and Western States take

most of the nickel and bronze coins.

Double eagles are being made for the depositor-

ries because they are more salable.

No silver is coined in subsidiary coin for depos-

itors. The Government coins for itself alone.

In the South the people are now using one-cent

pieces and threes and fives very extensively.

Five times as many five-cent pieces as ones are sent away, and five times as many ones as threes.

There is no coinage charged on gold. The only

charge is for parting, refining and toughening.

No silver is exchangeable for notes at the Mint.

That is done by transfers which come through

Washington.

Two weeks ago nearly \$300,000 in gold dollars were made for the Sub-Treasury Department at

There are lying in the depositories and vaults of the sub-treasury in this city nearly \$300,000 in five cent nickel pieces. Five- cent pieces are circulated considerably in New Orleans. Pennies were recently sent to the city, which were the first ever called for.

The large number of early orders for small coins came from the Southeast. Recent orders are chiefly from this section of the country.

A large amount of the \$38,000,000 in small coins circulated within the year were manufactured during the same period, and consequently the coins are new.

The government has issued over \$38,000,000 of small silver coins since the redemption of fractional currency began, and the market is fairly glutted with them.

The demand for one-cent pieces has increased within the last three or four months, and the demand for fives has decreased. This is due to the issue of so many dimes.

In brisk times the Mint pays out from \$3,000 to \$5.000 a day for the accommodation of people making change and for shipment through the country

No trade dollars have been made this year.— Several millions were coined in 1877. Their coinage was suspended in December. They were only to a limited extent for circulation.

Nickel and bronze are kept at par by redeeming them in greenbacks. They are deposited in the Mint in sums of not less than \$20, recipted for, and checks sent to the depositor.

No silver five-cent pieces have been made for five years. In fact they have been adolished, as well as the silver three-cent pieces. The nickel threes are still issued, although but few are used.

From \$5,000 to \$10,000 of eagles, half-eagles, quarter eagles and three-dollar pieces are made every year, in order to keeb up the history of the coin. Adout \$2,000 of ones are made annually for the same purpose.

The Mint shipped over the country in 1876 about \$500,000 in small coins, consisting of one, three and five-cent pieces. They went chiefly West and East. In 1877 only about \$385,000 in these small coins were shipped.

The authorities of the Mint can feel the pulse of business by the amount of coin sent in for redemption. If business is falling off redemption is large. When it is steady the redemption moves along at

the rate of about \$500 a day.

The greatest demand for silver coins is for the half-dollar. The quarter-dollar is the second favorite, and the dime is third and last in the list. The demand for half-dollars is twice as great as for quarters, and five times more halves are required than dimes.

When business is brisk in the city about \$700 or \$300 a day in change is required for nickel and bronze. The railroad companies are demanding more than usual on account of the six cent fares. This demand, however, has fallen off somewhat within the past few days.

Although more trade dollars were coined form April, 1872 to, December, 1877, than were coined of the dollar of the fathers for the eighty-one years preceding, it does not follow that the trade dollar is popular. The trade dollar was intended for the China trade, and nearly all that have been coined have gone to China, Japan and India,

THE

MARYLAND FARMER,

A STANDARD MAGAZINE.

DEWOTED TO

Agriculture, Horticulture & Rural Economy, EZRA WHITMAN,

Proprietor and Editor.

COL. W. W. BOWIE, Associate Editor.

141 West Pratt Street,

BALTIMORE.
BALTIMORE, MARCH 1, 1878

TERMS OF SUBSCRIPTION

One dollar and fifty cents per annum, in advance Five copies and more, one dollar each.

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1 Square of 10 lines	or less, each insertion	\$1	0
1 Page 12 months		20	0
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1% 6 "	***************************************	40	0
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	sertion, not exceeding four		
	tion		
Each subsequent ins	sertion, not exceeding four	8	50
		-	

Cards of 10 lines, yearly, \$12. Half yearly, \$7.

Collections on yearly advertisements made quarterly, in advance.

CLUB SUBSCRIPTIONS.—Any one who chooses to get up a club of ten, and sending us ten dollars will have a copy gratis.

In clubs of five or more, \$1.00 each; and names may still be added to the clubs already made up at the same price.

Any subscriber who will get a new subscriber can send us the \$1.00 and keep the 50 cents as commission for his trouble.

Our friends can do us a good turn by mentioning the MARYLAND FARMER to their neighbors and suggesting to them to subscribe for it.

TO POSTMASTERS.—You will see that the subscription price of the MARYLAND FARMER is \$1.50 per year; but you will be allowed a commission of 50 cents on each subscriber that you will send us; that is, send us \$1.00 and keep 50 cents on each.

Now is the time to subscribe, and advertise, when the year is young, and when we are sending out hundreds of specimen numbers of our journal, that it may make its acquaintance with new, and, we hope, be welcomed by old subscribers and advertisers.

FIFTEENTH VOLUME OF

THE MARYLAND FARMER.

This is the third number of the 15th volume of THE MARYLAND FARMER; and we claim it has been published longer continuously, without cessation, by the same publisher, than any other farmers' journal in this or other States south of Philadelphia.

A popular magazine,—as attested by our subscription list, frequent kind letters from parties, and the notices of our brethren of the press in this and other Southern States,—and is also a great advertising medium, as shown by the numerous new advertisements in the present number.

During the present year, we shall allow nothing to prevent our making it superior to all former issues, and maintain beyond dispute its high character.

Its aim will be to admit nothing in its columns like Theory, unless based on science controlled by reason; nor anything called Practical, unless proved by successful experiments.

If our old subscribers will do us the favor to canvass for The Maryland Farmer, by showing it to their neighbors and soliciting their subscriptions, they will confer a great favor on us, and, we do not doubt, confer a greater profit on the new subscriber.

MAKE UP CLUBS.

To Clubs of five or more, with pay in advance, we will supply THE MARYLAND FARMER at \$1.00 each, per year,

Those who will send us \$2.50, during this month, shall receive two copies for the year.

Any one who will send us six dollars for six subscribers, shall receive a seventh copy for getting up the club.

These terms enable persons to get the Magazine at \$1.00 per year, postage paid.

Young Men!

It is an easy way to make money by getting subscribers for THE MARYLAND FARMER. Send 15 cents for Specimen Copies, and ascertain what Liberal Commissions we will allow.

ADVERTISERS.—While we are gratified to perceive from the large number of advertisements in the MARYLAND FARMER—increased monthly—that our journal is appreciated as a profitable medium, yet, we are surprised that farmers who have stock of all kinds for sale do not advertise more freely; merchants properly estimate the value of advertisements, while farmers lose hundreds of dollars by not doing as the merchants do. We have daily enquiries where poultry, eggs, sheep, cattle, horses, &c. are to be had, and at what price. We can not answer in all cases. It is true we have an agency ourselves for the purchase of such articles, but we would have our patrons deal with the owners, personally, who advertise,

OUR FRONTISPIECE.

We have the pleasure to present our readers with an excellent likeness of Hon. John Merryman, the President of the Maryland Agricultural and Mechanical State Society. Though a good likeness, it hardly does him justice, as he is handsomer than represented, which is an unusual thing in pictures.

Hon. John Merryman was born at Hereford, Baltimore County, on 9th day of August, 1824, being the fifth John, of as many generations, born at same place. He left school in 1830, at the age of fifteen; next year went to the Island of Porto Rico, serving as a clerk, in counting room of his maternal uncle Samuel N. Gott. Returned to his home in Baltimore County, in 1842, took up his residence at his present home, Hayfields in 1843, married in 1844, became proprietor of Hayfields in 1847. Was an active member of Maryland State Agricultural Society in 1840, elected one of its Vice Presidents in 1852, became its President in 1857. same year, was elected President of Board of County commissioners of Baltimore County. Continued as President of State Agricultural Society, until commencement of the war, having held two exhibitions on North Charles Street, Baltimore and one at Frederick, in 1859. Became member of Executive Committee of United States Agricultural Society in 1859, and participated in the exhibitions of that Society, as manager and exhibitor at Chicago, in 1859 and Cincinnatti, in 1860. In 1866, issued a circular, calling together the active members of the old State Agl. Society, which brought about its re-organization, under the name of Maryland State Agricultural and Mechanical Association, elected Chairman of its Executive Committee, and largely contributed to the handsome improvements at Pimlico, although deeming the location too inaccessable for the purposes of the Association. Time, has measurably overcome this difficulty, and the State grounds are now the pride of the best men of our time. In 1877, became President of the State Association, and held a successful Fair at Westminister. Mr. Merryman, also served two years as Treasurer of State of Maryland, and contributed greatly to reviving confidence in the Chesapeake and Ohio Canal. He has also been a member of House of Delegates of Maryland, acting as Chairman of Committee on Agriculture, of that Body; and is at present Vice President of the National Agricultural Congress. He is also one of the Board of Trustees for the Maryland Agricultural College.

The large ancestral estate has been added to by Mr. M., and it is kept in perfect order. His splendid herd of Hereford cattle and flocks of cross

bred sheep, so popular in the Baltimore market as mutton, are to be seen grazing on his fertile pastures. The homestead is surrounded by every evidence of taste in the ornamentation of the grounds, while the "latch string of the front door" is never pulled in, and every guest meets with a warm, social welcome from the inmates, who dispense hospitality with lavishness. We look not upon Mr. Merryman as a politician, as we eschew politics, but only view him as a farmer, whose example should be followed by our young farmers.

National Agricultural Congress.

This great Association held a meeting on the 19th instant, in Washington city, and was well attended by many distinguished men. During its deliberations there were many questions discussed of vital interest to those engaged in the pursuit of agriculture. These meetings must result in great good to the whole country, We have been relieved from the greatful task of reporting its proceedings by the excellent summary furnished by Prof. Warfield, for this and our next number of the MARYLAND FARMER.

Messers. Editors:—I send you, for publication, a hurried sketch of some of the discussions of the Agricultural Congress lately held in Washington. My review will necessarily be too long for one article. The opening address of President Flagg revealed the work and history of the organization from its beginning, and urgently pointed out its necessities for the future. The work is a pioneer one in the interest of a calling upon which rests the pillars of our government. It is designed to agitate questions of moment; to direct, after calm discussion, frequent consultation, the course of legislation in the interest of agriculture; to which end, the organization invites all subordinate organizations having similar objects in view. The able address was ordered to be printed for distribution.

At the first evening session resolutions for discussion were in order. Col. Beverly, of Virginia, offered one, urging the Committee of Congress to apportion not less than one-fourth of the sales of the public lands to further endowment of agricultural and mechanical colleges. This resolution was warmly advocated by President Purnell, of the Delaware Agricultural College, President Minor, of the Virginia Agricultural College, Professor Brewer, of the Sheffield Scientific Department of Yale College; Hon. M. Pridemore, of Virginia and Hon, D. Wyatt Aiken, of South Carolina. Klippart, of Ohio objected to the distribution of said fund in scrip, as many of the colleges had lost heavily in its speculation. Maryland sold her lands at 40 cents, whilst Virginia received 80 cts. Maryland's appropriation is thereby reduced to an income of six thousand dollars, whilst Virginia gets twenty thousand. Ohio had to sell at onehalf of the market value, thus losing a considerable fund. The discussion brought out the fact that our colleges are faithfully at work in creating a home influence in the interest of Agriculture. .Whilst none, as yet, are flatteringly successful in point of numbers, they are elevating a calling which, sooner or later, must be the leading one of our country. The resolution was almost unanimously adopted, and a Committee appointed to make known the sentiment of the organization. The report of the Committee was favorably received by those in charge of the work.

The list of credentials revealed the fact that at the evening session there were delegates from a great number of the States, including many representatives from Agricultural Colleges, Agricultural Societies, Granges, &c.; among the number, were two delegates from the Indian Territory. Col. Adair, a Cherokee representative in Congress, made a statement so full of interesting facts that I propose to notice some of them.

At the time of the discovery of our country, the six nations, the intelligent and civilized tribes in the Indian Territory, then, as now, were cultivators of the soil. The government was traditional; now, imitating ours, it is constitutional and is about the same as that which governed them when East of the Mississippi. There are twelve tribes, under written constitutions. In 1866. by means of a treaty, thirty-two tribes were confederated into an Indian Congress, which first assembled in 1869.

By means of the civilized influence of contact and association, other tribes are becoming interested leaving the chase and throwing aside their blankets, they are becoming cultivators of the

Four years ago, the Indian Territory raised more products than any other territory of the United States.

During the war, "though it was none of their fight," the territory lost heavily in stock, provender, grain and men. Many of the Indians took sides with both armies. The area of each farm ranges from 15 to 600 acres. From 15 to 30 bus. of wheat, and from 75 to 100 bushels of corn are raised.

Educational facilities are greater than in Missouri. Eighty-five common schools already exist. A sinking fund of 31 millions realizing 35 per cent. for schools, has been created. There are two "High Schools" in which American teachers instruct in all the ancient and modern languages sciences &c. Homes for the deaf, dumb and blind exist, "but there are not many insane."

Very few Mormons are in the country, but there are 12,000 Church members of all branches of religion; a premium of 160 acres of land is granted to all missionaries who will settle among them. The Indian nation only wants to be let alone. deprecates the change from the Civil to the War Department.

If his people must die, he wants them, at least, to share a white man's chances.

The succeeding day's discussions were upon agricultural education which 1 will reserve for your next number. Sheep husbandry, in all its phases, was ably discussed, Many of the delegates were in favor of continuing the tax upon wool in order to enable us to compete with Australia. The evening session of the last day was of the most telling speeches of the session. Sen-ator Windom, of Minnesota, Representative Hayes of Michigan, Aiken, of S. C., Regan of Texas, Col. Payton, of Va., Ex-Governor Morton of Nebraska, Senator Dore of Illinois, Mr. Fields of Illinois, and Warfield of Maryland joined in the debate.

Upon motion of myself, as one of the Committee upon organization, it was determined to hold semiannual sessions. The next session to be held August 27th, at New Haven.

The able officers of the past were retained. President—W. C. Flagg of Moro, Ill.; Vice-President at large-Thomas P. James, of Atlanta, Ga.; Treasurer—Ezra Whitman, of Baltimore; Secretary—Johnathan Periam, of Chicago. The only changes made in the list of Vice-Presidents, were the following, elected to succeed those who held last year the same office for their respective States. John M. Pugh, Ohio; John Merryman, Maryland; Prof. Brewer, Connecticut; W. H. Purnell, Delaware; George A. Fitch, Illinois; F. D. Curtiss, New York; D.Wyatt Aiken.South Carolina; Robt. Beverly, Virginia; W. W. Fields, Wisconsin; Col. Adiar, Indian Territory.

The sessions were decidedly interesting, because living questions of the day were handled in free and able discussion. Most Truly,

J. D. WARFIELD.

The Agricultural Exhibit.

The work of preparing the exhibit of American agricultural productions for the coming Paris Exposition is progressing rapidly at the Department of Agriculture.

The Southern States exhibit great interest and enterprise in the preparation of large contributions. Virginia, South Carolina, Florida, Louisiana, Kentucky and Tennessee, are especially ardent in procuring articles for exhibition to illustrate the resources of the South. The department itself is busily engaged in preparing sections of different woods of our forest trees, models in plaster of the specimens of distinct types of our various fruits and vegetables, etc. The weekly National Republican says:

The structure intended for the exhibition of the various products is of unique design, and is being constructed in this city, under the direction of Mr Joseph E. Holmes. It will be made in sections, so that it may be readily taken apart and shipped and put up at short notice. Besides this structure, which will occupy the central portion of the space allotted by the Commissioner-General to the exhibits in question, several cabinet cases will be provided for the reception of such specimens as will need special protection. Everything is now expected to be shipped from Washington by thedevoted to "internal transit" and brought out some | United States steamer Wyoming on March 15.

HORTICULTURE.



DIOSPYROS KAKI,

(FRUIT OF THE GODS.)

Known as the Date Plum, or Japanese Persimmon.

the peach or pear. It ranges in weight from eight to twenty ounces. Some grown by Col. Hollister, of Santa Barbara, the present year, averaged three quarters of a pound each.

Will fruit in from one to three years after being grafted.

The Persimmon should be planted like the Apple. A gravelly or light soil is preferable. It grows to a large size and is an said to attain the age of a hundred years. It is not affected by the curculio.

There is no fruit in Japan more common or popular than the Date Plum. It has been crossed and recrossed until it is to Japan what the Apple is to America. The late Hon. C. E. DeLong considered the Japanese Persimmon as one of the finest fruits in the world, and believed that it could be successfully and profitably introduced into the United States. The fruit is found in the same varieties of climate as the wild Persimmon of the Eastern and Southern States, and appears to be equally as hardy. Although the past season in California has been particularly unfavorable to its introduction, the various experiments made have proved that the trees can be readily transplanted from Japan and will succeed well.

This is one of the most wonderful fruits of that remarkable country, Japan, of which and of China so little is known to the world; but whose great resources and arts, fruits, flowers, &c., are daily being made known and introduced to Americans especially, through the growing channels of commerce between the two nations, and the industrious enterprize of the Yankee explorers and scientists.

It is strange that this superb DATE PLUM, should not have been introduced before this in the United States, as it possesses every quality to make it popular. The Rev. Henry Loomis, of San Francisco, California, has made it a specialty. From what reliable and distinguished men say of it, we conclude it must be one of the most delicious and beautiful fruits ever grown in any country. It is perfectly hardy in our climate, and particularly adapted to our soils; by our, we mean south of New York, and even further north it will probably flourish. Mr. Loomis thus sums up its great and rare qualities:

- (1.) The tree is highly ornamental, a prolific bearer, as hardy as the pear, and fruits as early.
- (2.) Its fruit is solid, and may be safely transported to any part of the country.
- (3.) It is in season from October to March, when other fresh fruits are scarce. When dried it is equal to figs, and can be kept a long time.
- (4.) It is of a bright yellow, orange or vermillion color, is unsurpassed for the table, and is considered equal to

There are two principal varieties of the fruit, the first of which is large, round, shaped like Rhode Island Greening Apple. The flesh of this resembles the pear or apple, and is eaten in the same manner. Its color is rich golden, and the meat "juicy, vinous and firm." This variety should be enclosed for a few days in a tight cask to render it perfect.

The second variety is oblong, resembling in shape a minie ball. This has a deeper, darker shade than the other; is soft, sweet, and custardlike; is eaten with a spoon, and with cream and sugar is one of the most delicious fruits that is known. The fruit attains a very large size. It is the variety mostly dried and prepared like figs for market.

Prof. W. E. Griffis, the author of "The Mikado's Empire," writes, "As regards the value of the Japanese Persimmon, there can be but one opinion. The tree itself, (see Plate,) is one of the handsomest of fruit trees, and in the fall, with its golden hued fruit hanging to the branches after the leaves have fallen, forms a beautiful and striking picture in a landscape.

"The timber furnished by this tree is very valuable, and is much used by the Japanese for carved work, cornices solid articles of furniture, and such objects as require a comparatively heavy and close grained wood, which by its color and tissue is well suited for ornamentation and handsome utility. The juice expressed from unripe persimmons forms a very useful liquid for staining wood, giving it a rich brown color, like walnut.

"Much of the carved work and wooden utensils and cabinets from Japan, often supposed to be walnut by our people, is in reality only common wood, stained with persimmon juice. Some of the most elegant wood carvings at the Centennial Exhibition were of this nature.

"As to the fruit itself, it is nutritious, palatable, and to a high degree charged with those chemical ingredients which give most fruits their value in preserving the health and puryifying the blood. This fact is insisted upon by the Japanese doctors, some of whom I have known to cure their patients by a 'persimmon cure' like that of the 'grape cure' of Southern Europe."

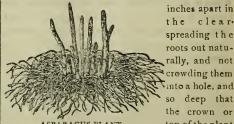
Those grafted, bear much earlier than those from the seed-the latter not always true to sort, and unreliable. Mr. Loomis sends out nothing but what is grafted; but will furnish scions or seeds if required. We had hoped to have given cuts of the two chief varieties of this really wonderful fruit, this month, but must defer it to our April number, when we will give them with further information, and also the testimonials of a few of much as possible. Salt is a good manure for As-

the many learned men, high officials and distinguished naval officers, in support of the claims this fruit has to public attention. We have hugely enjoyed specimens of the dried fruit sent us by Mr. Loomis-larger than any Smyrna figs we ever saw, and far more delicious, having only one or two large seed, the rest all pulp.

In the hope that we might be instrumental in introducing a new and delicious fruit as also a hardy beautiful ornamental tree, and thus adding to the treasures of our horticulture, we have promised to facilitate the procurement of these trees for our patrons from the introducer in San Francisco, by receiving cash orders, for any quantity, from one to a hundred, or more. Price, I year old \$1. each; two year old trees \$2.00, with a liberal discount on orders for more than 6, in proportion to amount of order.]

Making Asparagus Beds.

The quickest way to obtain Asparagus is to purchase plants, because by doing so the beds are fit for cutting one or two years earlier than would be the case were they started from seeds. To commence with the beginning, however, obtain seed as early as possible in the spring, and sow in wide drills, say five inches in width, and fifteen inches apart, about as peas are sown. Keep the soil mellow and the weeds destroyed, and in autumn, if the soil is good, you will have one-year old plants to transplant. One-year old plants are pretty small, and many prefer to keep them in the seed-bed until two years of age. An ounce of seed is sufficient for a drill about twenty five feet in length. In making a bed for the plants select a good mellow soil, if possible, and make it deep and rich, An Asparagus bed once made will keep in good condition for half a century, so the work should be well done. The beds must be narrow, so as to permit of cutting to the centre without stepping upon them. Set the plants not less than twelve



spreading the roots out naturally, and not crowding them into a hole, and so deep that the crown or top of the plant

clear.

will be about three inches below the surface. In removing the weeds have care not to injure the young shoots, and it is best to do this by hand as

paragus, and may be used with such freedom as to keep the weeds pretty well subdued without much further trouble. If strong two-year-old plants are set, a little may be cut the second year. The part used is the young shoots which commence to appear early in the spring, and they should be cut when five or six inches in height, and when the head is close and firm. Take them from a little below the surface, with a sloping cut. It is not best to continue cutting late in the season unless the shoots are very strong. After the season is over, allow the tops to grow and bear flowers and seeds. When ripe cut them close to the ground, cover the beds with a few inches of manure, and upon this throw the old tops. Early in the spring, remove the coarsest of the manure with a coarse rake or fork, and the Asparagus bed is ready for its spring work. The engraving shows a plant as it appears soon after commencement of growth in spring. Often, when planted, the young shoots will have made a little growth, but this is no injury. - Vick's Illustrated Magazine.

For the Maryland Farmer.

The Alternate "Spontaneous Growth" of Pine and Oak or Chestnut Trees.

It is an accepted fact with many persons that there is really a "spontaneous growth" of certain trees, and in rotation, by which is meant that the supposed germs are not from the natural or ordinary seeds, but that the trees spring into life in some mysterious manner. That these trees alternate in regions where they are indigenous is undoubted, and hence the popular error that they require no seeds to do so.

I propose to those who are curious in the matter, to go in June or July into a pine forest, at least in the region of Maryland, and looking carefully over the surface of the ground to note the great number of embryo trees, especially of oaks, and where chestnut trees are not distant, of them also, and of wild and cultivated cherry, of dogwood, haw and holly. Beneath the foliage of a thick pine wood they are held passive in growth for years, eventually dying out and replaced by others, until the forest is cleared away. They will observe too that there are no young pines there, the dense shade and condition of the soil being doubtless unfavorable to their germination and growth.

Bearing in mind the habit of squirrels, there is no difficulty in perceiving how the young oaks and chestnuts spring into existence; many acoms and chestnuts are brought long distances by the squirrels and deposited singly in the ground as a collateral food supply, and not being found again are

left to germinate; in short, the pine woods is a natural nursery favorable to these trees, and as well for the dogwood, the holly and cherry seeds that are dropped by the birds, favorably for germination.

Such of your readers as have examined or will examine a pine forest at a favorable season will not fail to confirm the above.

If their vicinity presents an opportunity te examine pine lands recently cut over, they will see also how magically these incipient 'trees spring into life; they have been held in abeyance long years, and when they have the benefit of more light and sunshine, they grow wonderfully and are "spontaneous" in a proper signification of the word.

When a forest of deciduous trees is cleared away, the soil is very favorable for the germination of pine seeds, which are wafted long distances and in great numbers by the winds, and many of them favorably deposited for germination in such soils especially. Being of rapid growth they soon overtop and stint the young deciduous trees that have grown up in the partial shade of the forest. So they soon succumb beneath the dense shade of the young pines. Many of your readers doubtless can confirm the above from their past observations.

D. A.

Ammendale, 28th Fanuary.

Our readers will peruse the above with much interest. It is written by a distinguished Naval Officer, whose life has been mostly spent on board ship, yet he has always been a close observer of nature,s laws, fond of Horticulture and is an excellent go ahead farmer, though advanced in years and daily engaged in his professional duties. Why should not boys preparing for the Navy be allowed to study agriculture and horticulture in our agricultural colleges? The two professions are not uncongenial or incompatable.

For the Maryland Farmer.

GRAPE PRUNING.

The pruning of grape vines may be done so scientifically as to be very certain in its prospective results. By examining the vines while they are growing, any one can see very readily from which buds, of the previous year's growth, have sprung the branches that are producing the crops of the current year; and this will serve as a guide to the pruning for the next crop, and so on from one year to another.

The shoots from canes older than last year, seldom show anything but wood, but that wood is good for a crop the next year. The shoots from

the buds at the junction of one year's growth with older growths may produce growth, but the clusters will be few in number, and inferior in formation. The first bud beyond the axil will be found much better, but generally not equal to the second regularly formed bud on the cane. The second and third and if the cane is vigorous, several more may be relied on to yield three clusters each, and occasionally, even four perfectly formed clusters of fine fruit. Up to the capacity of the vine you may count for this number from the buds of very strong and vigorous canes of last year's growth. And hence, according to the number of perfect clusters you estimate the vine capable of perfecting, you can readily select those giving the best promise and cut all the others off

It will be readily inferred from this plan of pruning that very much of the labor of pruning on the old theory of leauing spurs of one or two buds all over the vine, can be saved too with a good prospect of less wood and more grapes.

W. W. MEECH.

We welcome back our old correspondent from Vineland, N. J., and hope he will continue to give us his views and experiences about horticultural matters.

For the Maryland Farmer.

Pears and Pear Trees.

BY D. Z. EVANS, JR.

Pear culturists need never fear that the cultivation of the pear will not pay handsomely for many years to come, or, rather, there need be no fears entertained in regards to the markets being so overstocked with choice pears that the prices will fall so low as to make pear growing profitless. Not many years ago peaches paid handsomely, for there were but few large growers, comparatively, and there were no gluts in the markets as there has been for some few years past; but the comparative ease in which bearing peach orchards can be obtained has caused so many farmers to turn their attention to it, and the consequence has been crops which much exceeded the demand. With pears the case is quite different, for there are so many things to overcome, and so close attention to be bestowed for several years until the trees come into good bearing, there are but few fruit growers who prove themselves equal to the emergency and succeed.

Besides this, the first cost of the trees is much more than other kinds, while it takes longer for the standards to come into profitable bearing. Even after they have come into bearing, it may be found that the best varieties as are best suited to that

particular climate and soil, and disappointment is the result instead of the much hoped for success. Such a thing as this comes of planting without knowing what kinds to plant, and planting too hastily.

There is still another point we would speak of, a point of much importance and one on which so many amateur cultivators stumble. It is in planting too many varieties. A farmer or fruit grower determines to plant out a large plantation in pears. He selects a good site; the soil is just the thing for the successful growth of the pear. He puts the piece in extra order, plants nicely and cultivates, and attends to his trees with care for several years 'till they come into fruiting. He goes over his entire orchard and fails to find enough of any one variety to fill even a small package. This necessitates either putting two or more different kinds in one package or having quite a host of small packages.

Any one with experience in marketing fruit will know that such a course does not pay, and it all comes of the greed of having too many varieties. In a small plat, where the fruit is intended merely for home consumption, it is well enough to have quite an assortment, but in a market plantation restrict yourself to not more than 5 varieties which you are assured will do well, and such sorts as will command the best and readiest sales. It is well enough, if you can afford it, to have an experimental plantation, in which you can test the best known varieties, to see if they will do well in your climate and soil. If they do not prove good, they can beheaded back and grafted with some standard sort.

In selecting a place for the future pear orchard, care must be taken not to have the soil too light nor yet too heavy. A loamy soil, a clayey loam with a good subsoil is undoubtedly the best; but, no matter what is the nature of the soil, it must be thoroughly drained, either naturally or artificially, for pear trees positively will not thrive in soils which need drainage.

To get the ground in good position, it is best to have the piece well cultivated in corn a year or two before the trees are set out, unless there is an appearance of an unusually severe winter, we prefer fall planting, for the trees can then start off early in the spring, even before we could find the ground dry enough to put in the plow; and a good start the first growing year is almost everything with pear trees.

If the piece has been well cultivated, during the year, in corn, and the trees are set out in fall, it is not necessary to plow the entire piece, but strike out deep furrows with a two-horse plow, 20 feet

apart each way for standards and 12 feet apart for dwarfs, and then cross-line these furrows with a one-horse plow, to mark the spaces, at the same distances apart as above directed. Where these furrows intersect, dig places wide enough to admit of the roots without cramping them. Trim off, with a sharp kuife, all bruised, broken or mashed limbs or roots, cutting in the heads well. Dip the roots in thick mud and then plant the trees, being careful to pack the soil well around the roots with the foot. When a few rows have been planted, throw good heavy furrows to the trees on each side of the row, to protect the roots as well as to prevent the trees from being unseated by the wind.

The trees can be left this way 'till spring, when the spaces between the rows can be plowed and some hoed or cultivated crop grown between continually until the trees commence to bear, giving. always, the best cultivation and liberal manuring, If the trees are planted in the spring, the ground must be put in first-class order by plowing and harrowing thoroughly, afterward proceed in the marking off and planting as above.

In regard to varieties, the Bartlett (standard) and the Duchesse (dwarf) are undoubtedly at the head of the list of profitable markets sorts. The Doyenne Bussett (dwarf) is a very handsome pear. It has a rich color which is further enhanced by ripening in the fruit room. It has a handsome bloom on it, like the heavy bloom on a ripe Concord grape. It sells well, and comes in about or a little after the Bartlett in time of ripening. The Howell (standard) is a splendid pear and a heavy cropper. It sells well, or rather so; but, when buyers go more by taste and size, than by names, the Howell will be excelled in price by none others. We might name many others, but think this last will do well for a beginning.

For the Maryland Farmer.

Vine Culture.

BY D. Z. EVANS, JR.

The cultivation of the vine is affording profitable employment for hundreds of persons throughout the vast extent of our large country, yet we have not yet approached the extent devoted to vines in Europe. Before the cultivation of the grape became so general, handsome returns were realized, per acre, from grapes, and hundreds of persons rushed into the business expecting to realize a fortune in a few years. By the time the vines came into bearing, there were more grapes put on market than there was a paying demand for, and the consequence was very low prices. Although we are increasing our acreage of vines every year, the demand is increas-

ing, for the consumption is more general, owing to lower prices. When the freight and commissions are not too heavy, 5c per pound, wholesale, pays well. When the price goes to 4c and below, there is but little profit, unless the grapes be sold at that price direct from the vineyard. The cost of package as well as the expenses in handling the grapes is of considerable moment. Good cutters in the vineyards can be gotten for 8oc per day, and each one will cut and trim out the unripe and broken berries of from 200 to 300 lbs. These are cut into shallow handled baskets holding from 20 to 25 lbs. each, and, soon as full, are taken by the cutters to ends of the rows, from whence they are conveyed in a spring wagon to the packing house and carefully spread upon tables, where they are left for a day, to dry off and harden, to make them pack better and ship without so much danger of injury. The packages used are generally chests, each chest holding 4 shallow trays, and each tray holding from 20 to 25 lbs. each. Shallow boxes, made of thin, strong wood, are often used, holding about 20 lbs. each.

Almost any soil which will grow corn well is suited to the grape, and early spring planting is, perhaps, as good as fall planting, especially if the winter be a severe one. The ground is put in thorough order with the plow and harrow, after which deep furrows are drawn, with a two-horse plow, 12 feet apart. Some growers draw them only 10 feet apart, but this is rather too close when the trellis is up, for you are in danger of tearing out the vines when driving a wagon through to spread manure, &c. Across the furrows just drawn, draw light ones with a one-horse plow, and where the furrows intersect dig holes for the reception of the vines. Dip the roots of the vines in thick mud or manure, water to make the earth stick to the roots, before planting, thereby insuring their growth. Do not cramp the roots, but spread them out well and pack the soil well around the vine. As soon as the vines are planted, drive a small stake about 3 feet high, to reach vine, to which it should be loosely tied. Let the vine make all the growth it will the first season, keeping it tied up well, and the following fall cut back the vine to two or three good eyes, leaving but one good, stout cane grow to each vine. In the fall cut this back to three or four eyes and leave two canes grow, for the future arms, to be trained on wires in the "Fuller Method" the following year.

Corn is usually grown for a couple of season between the vines, as it necessitates good and constant cultivation, while the large stalks and leaves afford considerable protection to the vine

while in its tenderest growth. After that time the different kinds of vegetables can, and should, be grown between, so as to insure good cultivation a thing which is absolutely essential to the healthful growth of the vines. Manure must be applied liberally to the crops, and enough of it will find its way to the roots of the young vines to supply them with sufficient nourishment. After the vines have commenced to bear well, nothing else should he grown between the rows, for the roots will have taken possession of the entire piece, and too much deep cultivation will injure the vines by destroying vast numbers of roots. The cultivation, then, should consist of a shallow plowing early in the spring, a good hoeing between the vines in the rows, and then a harrowing, to be followed, about every ten days or two weeks, with a cultivator, to keep the weeds down and the soil mellow. While the vines are in blossom, all cultivation must be stopped or much fruit will be lost by disturbing the bloom. As soon as the fruit has set well, cultivation can be continued. For the first year or two the short stakes will do, but after that time longer onesfrom 51 to 6 feet-should be substituted, and, if a trellis of wire cannot be put up in time for the first fruiting year, the vines can be left to fruit the first year, or even, in an extremity, the first two years, on the large stakes.

It is a very important point to keep the vines well tied up, for you thereby secure a longer growth than if you are careless about the matter. Besides this, straggling vines are apt to be caught by the plow or harness when cultivating the vineyard, and torn out almost before the ployman is aware of it. We have seen more vines destroyed thus in one day than would, several times over, pay for all the tieing up. Even if the cultivator stops to take all the straggling vines out of the way, the loss in time is very considerable in the course of a week. A nicely tied up, and well cultivated vineyard is an source of great pride to the careful person, and gives evidence of care and thoroughness, which the slovenly, careless man is an entire stranger to.

WINE.—An attendent of the Persian monarch, said: "Wine was the most potent of human agencies." "It causes all men to err that drinketh it; it maketh the mind of the king and the beggar one; of the bondman and the freeman, of the poor and the rich: it turneth every thought into jolity and mirth, so that a man remembereth neither sorrow nor debt; it changeth and elevateth the spirits and enliveneth the heavy hearts of the miserable. It maketh a man forget his enemy and turn his sword against his best friend. Aye, it maketh a man a coward and a brave man, a miserable man and a happy, a true man and a treacherous, a kind friend and a fierce enemy, a human being and a brute—all in a single day."

To Farmers!

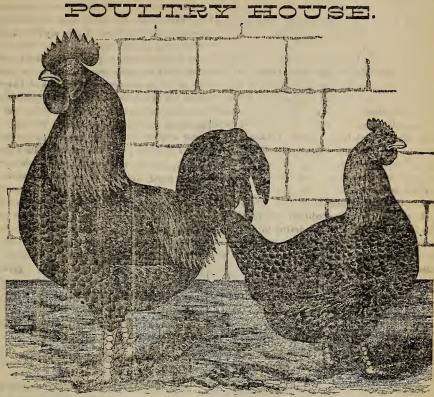
The Maryland Farmer is Your Paper!

We so design it! We want every subscriber to feel a personal interest in our Journal, and to look upon it as their institution; to write for it, to let their brother farmers have their experiences and views, and thereby call for an interchange of sentiments, and we want every subscriber to urge his neighbors to take the paper, and thus enable us to enlarge its sphere of action and increase its usefulness and attractiveness. We desire all our former subscribers to look on it as a part of their possessions and do all they can to increase its circulation, and thereby necessarily help the general as well as individual prosperity of all who are engaged in husbandry of every shade or character. Farmers, call the MARYLAND FARMER your paper. We wish to enlist your warmest sympathies and your best efforts to extend its circulation, which can be best done by yourselves contributing to its monthly fund of information.

Superior Mution.

Mr. Rose exhibited at his stalls in Lexington market last month, some thirty splendid mutton, making a fine show. They were Shropshires from the rich pastures of Col. Ed. Loyd of Talbot Co. Md. The enterprising proprietors of the Green House Restaurant on Pratt Street, (so long favorably known and patronized by Eastern Shoreman and Southern Maryland gentlemen, who make only a day's stay in the city, and who know where the best cooking and catering for the epicure, is to be had.) secured several and we tested the quality of a portion of one, and concluded that "finer or fatter" rarely "smoked on a platter." They weighed neatly dressed, from 95 to 120 each. This mutton can be distinguished from Southdown, jonly by those who profess to know, by taste, a Red-Head from a Canvass Back. Why do not our farmers generally imitate the example of Col. L. and raise sheep of prime breeds in defiance of dogs and rogues? Any energetic man can protect his flocks from both enemies if he has the will and nerve. Good mutton at 12 cents per pound, net carcass will pay far better than tobacco at \$2 50 per 100 pounds, or wheat at \$1.25 per bushel. Besides, sheep make wheat and any other crop, by their. valuable droppings.

HARD TIMES REMEDY.—A large and heavy crop of turnips, with plenty of cattle and sheep to eat them, would go a long way throughout the length and breadth of the South to soften these hard times.—Exchange.



PLYMOUTH ROCKS

For the Maryland Farmer.

American Breeds of Poultry.

Having for so long been accustomed to the wild mania for Imported fowls, &c., it is gratifying to notice the marked change in the fancy of the people. The most popular breed of fowls to day, in the United States is undoubtedly the Plymouth Rocks, and this breed having originated at home, that class who imagine that "distance lends enchantment" can only sigh that they can not send across the ocean for their strains of this favorite breed.

We Americans ought to learn that we can breed equally as fine fowls here as in England, and in certain breeds we are far ahead, as in Light Brahmas, &c., while there are other breeds which are distinctively American, both in their origin and breeding. Among these are the Plymouth Rocks and the American dominique color, wearing as it were, every day work clothes, and are constantly ready for business. The Plymouth Rock is rather

and have single combs, while the Dominiques have rose-combs, which are less liable to be frost-bitten They also breed regularly true to color-a perfection not yet attained by the Plymouth Rocks. Our cut gives a good representation of a pair of exhibition Plymouth Rocks, but in breeding the cocks, as yet, must be of a lighter shade than the hens, or they will throw some black pullets. Plymouth Rocks being a novelty, are exciting much more interest than the Dominiques, but on this account, this old established breed should not be neglected, as it would be hard to find a better fancier's fowl.

We have just received an order for six of these birds, to be shipped this month to Prussia, and we trust that they may excite considerable interest there. The Leghorns, White, Brown, Black and Dominique, although natives of Italy, are classed in England as American fowls and justly so, as they have reached their perfection, only by the judicious skill of American Poulterers. No breed of fowls can equal the Leghorns for non-sitting larger, owing doubtless to a cross of Asiatic blood layers, and no breeds can surpass the Dominique. and Plymouth Rocks for fancier's fowls where both eggs and table fowls are desired. Therefore, our American Fancier's and Farmers, (for poultry breeding is especially the farmers business) can not do better than to pay special attention to our own home breeds.

One word more and we are done. Let farmers awaken to the value of improved fowls, and be willing to pay a good price for good birds to increase the economic merits and market value of their poultry stock. Then a demand will be made for birds whose merits consist not so much in mere beauty and useless fancy points, (although to a certain extent these are necessary) as in their capability of maturing early, giving good flesh at a small cost, or in the production of an extra number of eggs in a twelve month. Then Poultry Fanciers (who breed for fancy and their own gratification and to whom is due the credit for keeping the various beeds pure) will, if they desire to sell their surplus stock be obliged to cater to this taste, and breed fowls whose pedigree is recorded on the scales or in the egg basket.

A. ATLEE BURPEE.

Philadelphia.

For the Maryland Farmer.

Will Shipped Eggs Hatch.

This has been a question asked since men have had energy enough to try the experiment; and that they will hatch when properly packed and shipped is evident, from the fact that thousands of sittings are being shipped yearly, hundreds and even thou sands of miles distant, being roughly handled by careless expressmen; and yet we find, if properly set, they will hatch just as well as if laid at home, consequently exploding the old fogyish idea that "eggs will not hatch if hauled across water." These thoughtless fogies forgetting, that in going from house to barn to set the hen, they cross numberless streams of water traversing the inner portions of the earth. Great care should be taken in packing eggs so as not to have them move out of position in the box. Some shippers of hatching eggs pack in bran chaff, or solt feed, but I prefer fine sawdust for the reason, that in packing, you shake the box a littleand press the dust gently between each egg they become firmed in the dust, and can hardly be broken, unless the box is broken, the pressure being equal on all sides, which you can not possibly get with bran, Some make a great mistake in taking too large a box to pack in and leaving so much space between the eggs, that on shipping, the pack ing settles, and the eggs roll and get out of position which I think is a very material fault, Eggs should

be placed small end down, and kept in that position until taken out. They should not have more than one-half or an inch of dust at most between each egg; they should be set as soon as possible, after arriving at destination. I give my first experience in hatching shipped eggs.

A friend and myself, received a setting of eggs each, from the same breeder, and in the same box. He set his as soon as they arrived and I kept mine some ten days before setting. His hatched all but one, mine hatched one out of thirteen; but I did condemn the breeder, as often is the case. They were shipped some 500 miles. Last season, the eggs I shipped (some of them 650 miles) gave entire satisfaction, while others again, sold to parties nearer home, and some to neighbors, gave no chicks or in some cases a few weak piny things, because they would not attend to setting them properly.

In conclusion I will say, that if eggs are properly fertilized and properly packed, they will hatch if sent to the Pacific Coast, if it does not take longer than 10 to 20 days to arrive at destination. Eggs should not be placed under great big awkward hens, as they will break them, and those that don't break, will be injured by being coated over with the broken ones.

A. W. FRIZZELL, Baltimore Co., Md.

Cooked Meat for Poultry.

Cook the meat you give your poultry, always. Chop it finely, using a common wooden bowl and household chopping knife, if you have but a small quantity of meat to prepare; but if you are keeping poultry on a large scale, substitute for the bowl a tight wooden box of a bushel capacity, and for the chopping instrument, use a common short handled spade with its blade ground to a keen edge.

Salt the meat as you would for your own eating. Mix it half and half, when fed out, with scalded wheat or corn meal—and it will serve your purpose much better than if fed in any other way.

The mode too often adopted is to throw raw meat to fowls. This is a bad way, and in summer season causes illness frequently. Cooked meat goes further, is more nourishing, and less injurious if over-fed than in the raw state.

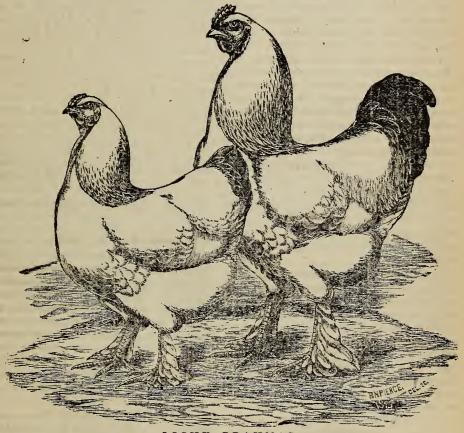
For young fowls very little is needed at a time; and either old or young birds, when kept in confinement, should not be stuffed with this kind of allowance. A large share of their feed should be grains and cooked vegetables. For growing fowls at any age this is the best staple food, when properly varied,—Poultry World.

EDITORS "MARYLAND FARMER,"

Gentlemen: - The cut accompanying this description of Light Brahma fowls was presented by Mr. C. B. Wise, proprietor of the Southern Maryland Poultry Yards, and one of the most successful breeders of Light Brahmas in this country, his fowls having frequently won honors at exhibitions.

The markings of Light Brahmas should be near as possible as follows:

Beak yellow, with dark stripe down the upper portion, Eyes, bay, red or pearl color; comb moderately low, and with three distinct rows, the centre row a little the highest, and slightly arched; earlobes and wattles of moderate size and bright red; head, small compared with size of body, and nicely fitted to the neck which should be small near the head, and gradually enlarging into a heavy neck hackle which should be white with each feather distinctly striped along the centre with black. Back, broad, moderately long, all white,



BRAHMAS. LIGHT

not excepting under color. Wings small and fitted feathered down to end of outer toe, and with a few closely to the body, all white until reaching the secondaries which should be white on outer and black on inner webs, the primaries or ten longest flight feathers should be pure black. Saddle full, and white until reaching the covert feathers which should be greenish black, very glossy, and with a slight margin of silvery white. The two sickles or longest tail feathers should also have a very slight margin of white; tail! pure black; legs yellow. strongly but not clumsily proportioned, and well

feathers on outside of middle toe, though some breeders prefer a clean middle toe; breast broad full and pure white in color, as also all other parts not here mentioned. I have given description of cock which is applicable also to the hen, except in one or two points, which are known by all, to be peculiarities of male birds.

The above description is rarely reached in color as most Light Brahmas have dark under color and also dark on shoulders, and some breeders assert

that it is necessary to have dark markings on the male bird in order to breed the dark hackles, and perfect wings on the pullets.

In speaking of the laying qualities, Mr. C. B. Wise writes me as follows:

"I think the Light Brahmas fill the bill nearer than any other breed we have, possessing strong constitution large in size, and are amongst the best layers; I have had them to commence laying in September, when six months old and continue through the fall and winter far into the spring—of course these are exceptions, but seventy-five eggs is not unfrequent before the desire to sit."

I can also certify that I have had some of Mr. Wise's fowls in coops, in the warehouse, which laid in coops three out of four days, for several weeks in succession, I also notice in the valuable Southern Poultry Journal, E. B. Hartwell, Editor, Lonisville, Ky., account of a trio of Light Brahmas, one cockerel, and two hens—one of which laid 76 eggs missing four days, the other laying 143 and missing only two. These were not special birds from a pen but a trio shipped to a gentleman upon an order.

The Light Brahmas, as a table fowl, is excellent and resembles very much the turkey, and some say is better when nicely fatted. In weight the cocks average nine to cleven pounds, and some special ones have reached much heavier weights—the hens eight to ten.

In finishing it may be of interest to your readers to be posted as to the average prices of Light Brahmas, cockerels, which come close to the standard sell to the fancy breeders at from \$20 to \$25 each, hens are oftener near the standard, and sell at \$10 to \$15. Fowls for serviceable farm purposes, where the breeder does not wish to breed for the show pen, sell at \$7 to \$10 per pair, according to quality. Eggs for hatching \$3 per 13, I will also add that he purity of breed is very doublful, where birds are oftered at less price than the above.

Respectfully, &c.,

W. S. TEMPLE, 47 S. Howard St.

ROUP IN CHICKENS.

Editors Maryland Farmer:—Your kind encouragement to us ladies to write you a little letter sometimes, induces me to again contribute to your magazine, trusting that my plain, domestic letters may be of some benefit to its lady readers.

I have seen, lately, many questions asked about wid roup in fowls, and seen stated in reply, very often, that it was a fatal disease; but I think when prop-

erly understood, it can be successfully cured, unless the fowl is too far gone to revive under any remedy.

Roup or cold, attacks the fowl in different ways, -swelled head, closed eyes, difficult breathing, loss of appetite, etc.; but, of all forms to be dreaded, it is the ulcerated tongue and throat-a form of roup in the bird's system; and only can be known when nearly too late. For, when the tongue becomes coated with a yellow, mucous stuff, and sometimes the throat, roof and under the tongue, the bird can neither eat or drink. I followed this course and with most happy results. time to cure a chicken, when its mouth is so ban, as above stated. Only by strict attention, by a careful and tender person can the life of the fowl be saved. If the chicken is not valuable, or one has plenty to spare, I would not advise caring for them; but have them killed at once and put out of their misery. I had four cured after their mouths had become entirely closed with that cancerous ulceration. Thanks to Prof. Corlett's book, I had my first information of the disease, and how to save.

This is the remedy: As soon as the chicken is discovered to be sick, remove from hen-house to a dry, warm place; bathe head and neck in warm water; dry with clean cloth. With a hard stick, made smooth and flat like a wooden knife, remove as much of the stuff as possible from the chicken's mouth; have a camel's hair brush, or a little mop made of cotton, dip it in a strong solution of vinegar and salt water; wash well the mouth and throat; have ready mixed in a half pint bottle of water one ounce of chlorate of potash, one ounce of white sugar. Give the sick fowl one teaspoonful of the mixture, three times a day.

GERANIUM.

A 502 Dollar Rooster.

That famous \$50,000 cow which was so much talked about in this country a few years ago, has found a rival in point of proportiouate pecuniary worth in a \$502 chicken. The English Agricultural Gazette says that a game cock was recently sold for the above excessive price, and suggests that in the future the raising of such chickens would prove a very lucrative source of income. The same journal, we notice, says that over \$13,000,000 worth of eggs were imported into England in 1876, and yet the supply was short of the demand. Here is an opening for poultrymen, and wider field for inventors of egg-preserving processes and egg-carying devives.—Scientific American.

ROUP-POSSIBLE CAUSE.

From my earliest years I have been an admirer and breeder of chickens. I cannot remember the time from my birth to my twentieth year that I did not have from thirty to a hundred and fifty fowls. I never knew from experience what roup was until the winter of 1875-6. Then I had a season of it. To-day I have a few fowls bought from other parties, under its baleful influence. Until the fall of 1875, I never fed anything in the way of grain except corn, oats and buckwheat, and I had never, up to that time, seen or known of a case of roup in my pens. That fall I began to feed what is called in this section wheat screenings-a second or third quality of wheat. Soon after beginning with this feed I noticed several of my young stock were coughing as though from irritation of the throat, and before many days had passed my whole flock was more or less affected, and I lost a large number. I never want another experience like

Last winter while I was absent from home my servant fed corn almost exclusively, and there was no roup in the pens. This season, so far, my own fowls have been healthy and hearty. I have fed corn and whole wheat. The largest breeder of fowls in this section has had an experience very similar to mine, except that he is now feeding wheat screenings, and the old trouble is becoming visible. My sister, living near Hartford, and who has been very successful with poultry, keeping nearly, a hundred hens last winter, feeds her fewis only on corn and meal, and has never heard of roup. I should like to hear from other poultrymen on the subject. Is our experience about here peculiar, or have others noticed the same thnigs? C. P .- In Country Gentleman.

[We have known similar experience ourselves. We refer those interested to the valuable communication of a lady correspondent in this number on this subject. She is a practical amateur poultry raiser and writes to the point. We hope to hear, often, from her and other ladies, giving to our readers their views and experience about poulry.-Eds. Md. FAR.]

Put a tablespoonful of sulphur in the nest as soon as hens or turkeys are set. The heat of the fowls causes the fumes of the sulphur to penetrate every part of their bodies, every louse is killed, and, as all nits are hatched within ten days, when the mother leaves the nest with her brood, she is perfectly free from nits or lice. - Scientific American. finer queens will be the result

THE APIARY.

Bees and Honey in the South.

BY PAUL L. VIALLON.

CHAPTER IX.

HOW TO REAR QUEENS.

The advantage of rearing queens, and keeping a few extra ones on hand in case of emergency, as well as for all occasions where new queens are needed, cannot be overestimated.

It is a known fact that by giving a laying queen to a queenless colony, instead of letting them rear one, about three weeks are gained, which is nearly equivalent in value to a swarm. Therefore, it is imperative, if we wish to secure the best result, to bear in mind, that the sooner a fertile queen can be given to a queenless stock, or articficial swarm, the less time will be lost in breeding, and therefore the more bees there will be to gather honey and to defend the hive from robber bees and from the bee-moth.

When we wish to rear queens it must be done from the eggs of a mother that is not over two years old and which is prolific, and whose worker progeny are industrious.

When we are ready to rear queens, which ought not to be later than the first week in March, for this latitude, and not sooner than when the drones commence to hatch out, as we must have laying queens to make our artificial swarms a few days before the swarming commences, we insert a frame filled with new worker comb, in the center of the brood nest of the colony selected to rear queens from. In four days we examine the comb, and if it contains eggs and some brood just hatching, we remove it and, after brushing the bees off, put it in an empty hive and place on each side of it one or two frames with combs. (At least one of the combs must have honey).

Now we remove one of our strong colonies to a new stand and place the hive, containing the frame of eggs and no bees, in its stead-if this is done in the morning, by evening this hive will contain a great part of the bees of the colony removed, which will will soon commence to form queen cells to the number of,15 or 20.

Another plan to obtain queen cells, is to remove the Queen from the colony selected to breed from. This Queen may be used in making a new colony, in the manner spoken of under Artificial Swarming. This queenless colony will start a lot of queen cells, but I prefer the first method as better, and

In 8 or 10 days after the bees have started the cells we are ready to form our nuclei. We must rear a few more queens than we need for our increase, or artificial swarms, so as to have a few on hand in case of need.

CHAPTER X.

WHAT IS A NUCLEUS?

A nucleus is a small colony of bee

A nucleus is a small colony of bees in a small hive, for instance two frames, one of brood and one of honey, and about a pint of bees.

Unless queens are raised for sale, the nucleus hive need be nothing more than the ordinary hive used in the apiary, contracted by a division or partition board, so as to allow only a chamber large enough for two or three frames. We must have as many of these hives ready as we have queen cells. Now to populate these nuclei we go to different hives of the apiary for our frames of brood and for the bees -We must always choose our strongest colonies for that purpose-We blow a few whiffs of smoke into the entrance of the hive we intend to take the frames of comb and bees from for one of the nuclei, and open the hive and hunt for the Queen; and when the comb she is on, is found, we place it in a little box that we have for that purpose—this is to be certain that the Queen is not among the bees we put in the nucleus, as this would take the Queen from where she is most needed, and would lead to the destruction of one queen cell; after we have found the Queen, we take one frame, of capped brood and one containing honey, and place them with all the adhering bees in the nucleus; as many of the old bees that we have placed in the nuclei will return to the hive they came from, we shake off into the nucleus the bees from two more frames so as to make it sure that we will have enough bees in it to keep up the proper temperature. Now we continue the same operations until we have given each nucleus two frames with bees as directed above. After we have done this to all our nuclei, and every one is placed on the stand prepared for them, which ought to be in a shady place, we are ready to insert in each one a queen cell-now we go to the hive which has the queen cells, and with a sharp thin bladed pocket knife, we cut out all the queen cells but one; but if we should need more queen cells, we cut all the cells out and insert another frame of eggs or brood from our choice queen, so as to have the bees to rear some more cells, and continue inserting a new frame of eggs as long as we may need queen cells, after cutting the cells out for our nuclei; but as this colony which is rearing queens, is queenless and losing bees daily, it is necessary to give it occasionally a frame of sealed brood, which will keep it in good condition until it gets a laying Queen,

In cutting the cells leave when practicable, about one inch of square comb attached to them, and place them in a little covered box, to protect them, until ready to insert them into the nuclei, from the hot sun or cool air, and from robber bees which may be trying to steal the honey that may have been running in the operation of cutting the cells out.

To insert the Queen cells, giving one to each nucleus, we make a cut in the brood comb of the nucleus, just large enough to receive the cell, and to prevent compressing the cell, for if the cell is pressed or dented, if it hatches a queen at all, she will be crippled. An open space must be left below the cut.

We must fit the cells as nicely and securely as possible or the bees may tumble them down in the bottom of the hive.

It very often happens that two or more cells are built so close together, that it is impossible to separate them without breaking one or both. In this case we insert the whole, and by looking often to them we may find the first Queen, while she is biting out her way, or soon enough after she is out to save the others.

In three or four days after the cells are inserted, if we have done these operations in proper time, nearly all the queens will be hatched—which can be ascertained by looking at the cells. In case the young queen is not seen, if the cell is bitten open on the side near its base, it has been destroyed and another one must be inserted; but if it is open at the tip end, and especially if the cap is hanging to it, we may rest assured that a queen has just emerged from it.

From a week to ten days after the queens are hatched, they will have become fertilized and will be laying, which is readily determined by examining the cells for egg.,—then we will be ready whenever the time comes for our divisions or artificial swarms.

As the bees are liable to leave with the virgin queen on her excursion to meet the drone, whenever they have no unsealed brood, it will be well to prevent this to insert a piece of comb contain ing eggs and young larvæ in each nuclius, two or three days after the queens are hatched; and also, if the queen should be lost in her bridal tour, the bees will have materials to form another, should it escape our notice.

If queens are raised for the market it will be preferable to use small hives as nuclei, to contain two or three frames of the same size used in the apiary, and about the same directions followed as given above,

CHAPTER XI.

ARTIFICIAL SWARMING.

This method of increasing our colonies is safer, and ought to be preferred to Natural Swarming, as by this procedure we can divide more evenly, and increase the number of our colonies as may be required, without any loss of time in watching and hiving natural swarms.

But we must bear in mind that it must not be overdone, otherwise failure will be the result-and this has been the experience of many who have abandoned bee culture with disgust; and they are the ones who say, that bee raising don't pay, without knowing that they were the cause of their non-success.

This mode of increase is so easily performed that the beginner is apt to overdo it, thinking that by having a large number of colonies he will reap much; but, as I said before, if we wish to succeed and derive some profit from our bees, we must have strong stock; therefore, whenever you increase by artificial means, you must do it cautiously and only when our stocks are strong, and can really spare a

I have been practicing artificial swarming for several years and with the best of results, and I never have had more than double the number of my stocks, in favorable seasons, unless it was at the expense of surplus honey.

There are many methods in swarming bees artificially, but I will not complicate the subject by detailing all of them, and will speak only of those I have been practicing and that I know to be good

If we have several colonies, we will make the new colony by taking one or two frames of brood from three or four colonies, according to their strength, and bringing them with the adhering bees, into one of our nucleus hives from which we have previously removed the partition board, inserted when making the necleus, for the purpose of contracting the chamber; and we will fill it with empty frames, and also put some empty frames in the old colonies in place of the frames of brood taken out-only we must be sure not to remove any of the queens of the old colonies, and to prevent this, I would advise to hunt for the queens as before directed. previous to taking any frames of brood for the nuclei. This mode of increasing does not weaken the colonies to any extent, and we can make a new colony from every three or four old colonies, and we may repeat in two or four days, until all our nuclei are filled. Another method, is to take out four frames of brood with the bees adhering to them, from one of our populous colonies, and to place them into the nucleus hive, also to take the WILL MAKE A VALUABLE BOOK.

remaining frames and shake the bees into the nucleus and return the frames to the old hive-always be sure not to put the queen of the old hive into the necleus or new hive-and we will fill both hives with empty frames, or frames with worker combs in preference, if we have some spare ones. The old bees will return to the old hive, while the young ones will remain peacably with the new queen. This must be done in the middle of the day, while the bees are busy and the yield of honey abundant, otherwise I would advise the caging of the young queen for about thirty-six hours, in the manner to be described under the head of "Introducing Queens." The fact is, I would not use this method unless the honey is coming in fast. The easiest method that I have practiced yet, is simply to cause the necleus and a populous colony to exchange places; as for instance, to remove one the nuclei to where a populous colony stood, and to place this colony in the place of the necleus. Before doing this remove the partition board from the nucleus and fill it with empty frames, or better frames of worker combs, and cage the queen for about thirty-six hours, or until the strange bees make her acquaintance.

This system is based upon the well-known law, that these bees will always return to the exact spot where their old home stood; and this is one reason why all hives in an apiary should be alike and painted the same color-which will prevent the bees from hesitating and roaming too long before entering the new hive.

It will will be seen that it is necessary to remember the dates in nearly all the operations in rearing queens. The date of inserting the comb into our choice colony, to have eggs to rear queens-the date that this comb is given to bees to form cells -the date the cells are introduced into our nuclei -the date our queens hatch-and the date our queens begin to lay, etc. Therefore to save trouble and work, I would advise to have every hive numbered, and to have a corresponding number in a memorandum book, giving a page to each hive, so as to record the state of each colony, the operations made or to be made, etc. Small registering slates hung to each hive, or printed registering cards tacked on the side of each hive, as used by many Apiariats might be used with better advantage .- Our Home Journal.

SUBSCRIBE TO THE

MARYLAND FARMER.

PRESERVE YOUR PAPERS AND KEEP YOUR FILES COMPLETE, YOU WILL HAVE USE FOR MANY THINGS PUBLISHED, AND WHEN THE VOLUME CLOSES IT

FORESTRY ASSOCIATION.

Meeting at Willard's Hall-A Memorial to Congress.

The American Forestry Association reassembled yesterday at two o'clock in Willard Hall, the president, Dr. J. A. Warder, in the chair, and quite a number of delegates present. Several communications were read from different persons, who regretted their inability to attend.

Mr. John Saul, of the District of Columbia, chairman of the committee on business, submitted his report, including the programme of proceedings. An address on "Forestry and Its Needs," was delivered by the president.

Messrs. Brewer, Saul, Weltz and Hoyt fully discussed several important points set forth in the ad-

A unanimous vote of thanks was returned to the president for his excellent contribution. The following essays were submitted by Mesrs. J. C. Neally, E. K. Prices, and Thompson, respectively "Diseases of Forest Trees," "Sylviculture" and "Forestry."

A MEMORIAL TO CONGRESS.

The following memorial was adopted unanimously, and a committee consisting of Professor Brewer of Connecticut; Dr. J. A. Warder, Ohio; and Mr. J. A. Saul, District of Columbia, were appointed to present it to the United States Congress:

"That the subject of forestry and tree-planting in all their bearings upon timber production, water supplies, and climatic influences, is a matter of vast importance to the future of our continent.

"Those of us who have at all considered the subject realize how sadly this branch of agriculture has been neglected in our country, and we feel the necessity for immediate action, and for the fostering aid of the General Government. Moreover, those of us who have already made some advances in the great work of reforesting the lands that have been stripped of their primeval covering of trees, as well as those of us who are making attempts to clothe with woodlands the open prarie regions of our vast interior basins, all alike, are fully impressed with the magnitude of the undertaking, and are discouraged by the ignorance which, unhappily, prevails among us, as to the best modes of procedure necessary to bring about the most satisfactory results.

"We have full faith in the talents and ingenuity of our fellow-countrymen, and believe them capable of solving any problem that may be presented for their solution, be it even so great a one as the and abroad.

reproduction of the woodlands, that are now so nearly destroyed, and the development of an enlightened system of forestry, adapted to our continent. It is believed that it may be possible to change parts of our country now tree less and arid, into regions of trees and water courses, thus providing for occupation by a teeming population. Still we are convinced that unless aided by Government the solution of this forest problem will require a century or more for its completion, in the results of the necessary experiments that it must be carried out, and the country, in its threatened needs, cannot afford to wait so long.

"But we also feel assured that the centuries of observation and practice, which have been devoted to this subject in Europe, have already educed systematic and successful results, in the broad areas of those countries where forestry has been most carefully studied and practised for so great a length of time. From this rich treasury of facts, and the principles deduced therefrom, we feel confident that much may be advantageously drawn for the

benefit of our country.

"We therefore respect ully beg of you to take such action as may be necessary in the premises; and hat without unavoidable delay, you will liberally provide for the means of sending a commission to observe carefully and fully to report upon this subject in all its bearings, for the benefit of the agri-culturists and other citizens of our land."

The association then adjourned, subject to the call of the chair .- From Weekly National Repub-

lican of Washington.

The National Butter, Cheese and Egg Association will holds Its 5th Annual Convention in Chicago, March 6th, 7th and 8th, 1878.

It is expected the attendance of Producers, Stock Raisers, Implement Manufacturers, Shippers and dealers in DAIRY products, will be very large, judging from the great interests manifested by the increased attendance at each former meeting.

This is a very important associatiation calculated to increase its usefulness which already has been sensibly felt by those engaged in butter and cheese making and egg selling. It is surprising and almost incredible, that, in a few years, these home industries have reached an immense amount

The annual product of Cheese in the United States for the post year, 1877, was three hundred million pounds, or about one million pounds for each working day of the year. Of this product one hundred and ten million pounds was marketed abroad.

With attention to standard excellence, this export can be steadly increased, as we can have the "world for a market." The Butter made during the same period, is estimated at eight hundred million pounds. The steady increase in the establishing of Creameries, Coroperative and more careful Dairying, will undoubtedly largely increase the demand for good Butter from abroad.

For the superior article of Condensed Milk. there is a steady and incleasing demand at home

LADIES DEPARTMENT.

Chats with the Ladies for March.

BY PATUXENT PLANTER.

The Violet.

"Down in a green and shady bed A modest violet grew, Its stalk was bent, it bung its head As if to hide from view.

And yet it was a lovely flow'r. Its color bright and fair; It might have grac'd a rosy bow'r, Instead of hiding there.

Yet there it was content to bloom, In modest tints array'd; And there it spread its sweet perfume, Within the silent shade.

Then let me to the valley go, This pretty flower to see; That I may also learn to grow, In sweet humility.'

The shepherd-poet Burns says: "The violet is for modesty,' while others, the French particularly, deem it typical of faithfulness. Whilst the first Napoleon was in exile, this little flower was adopted by his followers as a sign of their faithful attachment and as an emblem of him they styled it Le Pere la Violette.

It should, in the language of flowers, be recognized as em-

blematic of a true, noble woman-humility, modesty and faithfulness-three essential traits in the character of a love-able woman.

This is the time to look after your violets, heart's ease, crocus, snow drops and other early blooming plants, and search the woods for blood-root and other early plants, to take them up and have them near you in your flower beds; some of our indigenous wild flowers are more beautiful, and more curious than those which come from afar and are | ject on the flower border,

dear bought. Many a lovely plant and flower is to be found in dell, or on hillside, or sheltered recess near to our homes, which on transplanting to our gardens, would be the wonder of many, and would elicit questioning as to "where did you get this rare and lovely flower?" How oft do we tread on treasured pearls without heeding where we step?

Let me call your particular attention to a new Coleus brought forward by Mr. H. A. Dreer, florist of Philadelphia, this year. It originated in England. Mr, Dreer says of it :- "This distinct and rare variety is not a garden hybrid, but an introduction from the Duke of York Island. Its bold and deeply laciniated foliage is curiously streaked with rich brown, on a bright green or yellow ground, the brown turning to bright red on the yellow surface. These peculiar markings, and the unusual form of the leaves, give the plant a bizarre and curious appearance.

> The following illustration was taken from Mr. Dreer's plant.

I desire also to ask you to look at the cut of the new cockscomb of remarkable beauty and great variety. How our old time flowers are coming again in fashion under the improving powers of skill and science, as constantly displayed by our florists and amateurs.



COLEUS PICTUS.

Messrs. Nanz & Neuner, of Louisville, made this improvement on the Japan Cockscomb, and now the stock is in the hands of Messrs. D. M. Ferry & Co., Detroit, Michigan. It grows about 15 inches high, with a collar of leaves under the crimson head, and small collars under the smaller

I owe my thanks to Messrs. D. M. Ferry & Co., for the following illustration. It is a superb ob-



From flowers, permit me to turn your attention to the useful, ornamental and money making, at the same time, elegant parlor or sick room industry. It is a new employment, refined, beautiful, and easily understood.

IMPERIAL LACE MAKING.

In the hope that I will be doing my gentle readers a great service and helping the invalid to while away many weary hours. I give the following from a correspondent of the Boston Evening Transcript November, 15th, 1877:

"It is an important thing to introduce a genteel industry-one that would have the advantages of giving occupation, and at the same time some little remuneration. There are very few of them that, for instance, the daughters of a tolerably genteel American family can turn a hand to. A man does not care to see a square bundle come from the merchant tailor's, and very few American families would like to see an armful of pantaloons or of coats or vests taken out of the house en route to "the shop." And yet many so called genteel families ought to have something to turn a hand to. Years ago, a writer in the Atlantic Monthly had an article headed "A Plea for the afternoon," which was in favor of giving occupation to men advanced in life. He might now give us a plea for the forenoon, and for the young and old. I believe the hundred and one genteel industries of France caused the stockings and crocks to be filled with napoleons that turned out in such abundance to rid the polite nation of the presence of the unwelcome, sturdy and persistent Prussian. The titled ladies in Ireland have taught girls the art of lace-making, and you may go into the little shop of the Quaker Carr in Dublin to find hand made lace, richly yellow, which was made by the girls of Lismore and Cappoquin, in Waterford County. It was a great boon to those girls to place that "bobbin" art at their fingers' points. The Children's Aid Society did and do a great educational service in giving plants to the scholars of their schools At a given time they bring the plants back, and rewards of merit for the care of the plants, as one or the other may have succeeded, are given to the shildren. All these incentives and teachings are

good. I have before me a beautifully printed and illustrated "IMPERIAL MACRAME LACE BOOK," issued by Messrs. Barbour Brothers, 134 Church street. New York; 242 Market street, Philadelphia. It has forty one pages and seventeen artistic illustrations, and enables one to make the acquaintance. of an art much in vogue in the sixteenth century. Macraine Lace is now amusing the ladies of the European courts. The Messrs. Barbour Brothers claim the honor and privilege of introducing this pleasant parlor occupation to the ladies of America. For once the parlor and boudouir occupation cannot be encroached upon by imitation "down It is peculiarly suited to genteel and deft fingers. Macrame I ace of Barbour's Irish flax thread will so defy the elements of time that in after years the children can say that not alone did the beautiful work come from mother or grandmother, but they can add that one or the other made it. But I might as well stop. No writing of mine could take the place of the volume, and I will simply suggest to my fair reader that she had better send a note to Messrs. Barbour Brothers, requesting a copy of the "Imperial Lace Book." I may add that Macrame Lace is not above and beyond amusing gentlemen. Ladies or gentlemen confined to the house, or to the sick room, will find it a source of great amusement. Certainly, this offering at the shrine of the beautiful and useful, as Macrame Lace is, is an elegant as well as a generous one, and the Messrs. Barbour Brothers deserve general thanks."

The illustrated Lace Book is sold at 25 cents.

The origin and meaning of the word "woman" having been quite recently under discussion in the pages of the London Notes and Quiries, a Dublin man sends the following old verse which he lately came across in his readings:

When Eve brought woe to all mankind, Old Adam called her woe man, But when she woo'd with love so kind, He then pronounced it woo man. But when with folly and with pride Their husband's pockets trimming. The ladies are so full of whims, That people call them whim men.—Ex.

THE DEER CREEK FARMERS' CLUE held their last monthly meeting at the hospitable residence of Parder Lee, Esq., on Thomas' Run.

In addition to the regular members a large number of invited gues's were present and joined in that, at this time, most interesting question, the condition of our public roads and how to improve them. The result was the adoption with great unanimity of resolutions looking to a trial of the contract system and calling district meetings to recommend the same.—Harford Democrat.

[We rejoice to see our friends in Harford County working so manfully in the cause, and especially for one of its most important features—Roadways. The Contract System blended with our Township System will furnish good roads and advance the value of real estate wherever neighborhood good government may prevail, and too, at a cost comparatively small.]

TABLE DECORATIONS.

Messrs. Editors Maryland Farmer.—A few suggestions about the all important table, may not be amiss in the Ladies Department. Never use sweet scented flowers upon a dinner table. If flowers are used as a center piece, let them be as near as possible without scent, rich and bright in hue; well mixed with green. For breakfast, a red or deep pink, half blown rose, with a green leaf or so, attached, stuck in a well printed print of real golden butter, (not colored) adds to the appetite and also to the attraction of the table, when all else is in keeping. For parties, or light suppers, flowers need not be so scentless; but heavy perfumes are out of taste at all times with food.

There are so many pretty things for the table that I cannot pretend to mention them now.

It is the fashion again, to use for breakfast and tea, (if one is old fashioned enough to have a happy family tea-table,) the old china and silver belonging to a past generation on the bright polished table, with the new and fancy mats for dishes and plates, with the beautiful designs in napkinry.

GERANIUM

THINK OF THIS.—"A laboring man that is given to drunkenness shall not be rich."—Ecclesiasticus xix, l.

To be rich is the object of most men; and there is nothing truer than that the laboring man who is a drunkard must be poor. Poverty is a fiend that is corked up in the whisky flask, as were evil genii in the sealed bottles of the Arabian Nights Entertainments. And when wages go for sin, and tools are pawned, and furniture sold and broken, it is pretty plain that the laboring man of to-day is as likely to be poor as the one spoken of in the Apocrypha. Think of that, when you first join the great band of those who pass the bounds of sobriety. Poverty will never leave you if you take to tippling.

M. K. D.

[The above, by Mary Kyle Dallas, in the N. Y. Ledger, is the most practical, sensible and convincing sermon on intemperance we have read for sometime.—Eds. Md. Far.]

HOUSEHOLD RECIPES.

OYSTER SALAD.

Drain a quart of oysters from their liquor, and cut each one into four pieces. Cut one or two heads of blanched celery into small pieces. Do not chop either celery or oysters, but use a sharp knife. When they are prepared, set them in separate dishes in a cool place, and just before serving, mix them carefully together; put them in the dish

in which they are to be served, and pour over them the following

SALAD DRESSING.

Beat the yolks of two eggs and with a teaspoonful of mixed mustard, and add by degrees four teaspoonfuls of olive oil, stirring constantly as you drop it in. Add two even teaspoonfuls of salt, and two heaping full of pulverized sugar.

Put half a cup of sweet cream-or rich milk if you have no cream-into a double boiler, and set it on the stove to heat. When at the boiling point, put in two teaspoonfuls of corn starch dissolved in a very little sweet milk. Stir until it thickens, and when just boiling, pour slowly through a gravy strainer on the prepared eggs, stirring briskly. When partly cool mix in a little good cider vinegar. The dressing should be prepared several hours before it is wanted, and set in a cool place. It should be perfectly cold when it is poured over the salad, and should look like thick soft custard. If too thick add a little more cream or vinegar, and next time be more sparing of the corn starch; if too thin increase the quantity of the latter.

OYSTER TOAST.

Put a tablespoonful of butter into a frying pan, and when turning brown, add a quart of oysters with their juice; put in a cup full of sweet cream, or rich milk, and season to taste with pepper and salt. When almost boiling, add two teaspoonfuls of corn-starch rubbed smoothly into the same quantity of butter; let all come to a boil then pour it over slices of buttered toast.

THE USE OF LEMONS.

I do not think that there is an hundreth part of lemon juice used generally as its valuable qualities would seem to command. I know of nothing better as a stomachic corrective as well as a strengthener of the nervous system. We all know that it is used for rheumatism, and I have no doubt is also good for gout, if taken regularly three times a-day, and at least half a gill at a time. It can be taken in much or little water or no water at all. It is not unpleasant, one soon becomes accustomed to it, and would rather drink it than with the pure water. For headaches it is the best cure I have ever used. It will relieve it in from ten to fifteen minutes, by a single dose. I would not advise less than half a gill at a time. I know people who take it three times a day as a preventive of disease, and as a refreshment in hot weather. It quenches thirst, also, better than anything else. No sugar. ALINE

Germantown Telegraph.

OUR LETTER BOX.

MESSRS. EDITORS:

Dear Sirs—I see you have started a "Letter Box," and will answer questions—I have for a long time wanted to know why, or after what, were the days of the week named. Back here in the country we have not the means of finding out these things, and I have always hesitated to ask the question of the New York papers, as I did not feel that freedom I do with you.

B. J.

Wisconsin, Feb. 10.

It was the Romans who gave names to the days of the week, to correspond in their language to the names of the sun, moon and the five planets then known, as follows:—Sunday, the day of the Sun; Monday, for the Moon; Tuesday, named after Mars; Wednesday after Mercury; Thursday after Jupiter, or Jove, called Thor in Icelandic; Friday after Venus, and Saturday after Saturn.—Eds. Md. Farmeer.

MESSRS. EDITORS:

Dear Sirs—The February number of your most readable Magazine came to hand as usual, and as I have never written you before, it affords me great pleasure to express to you, the gratification we all have in reading it. Among the many attractions you offer this month, one in particular, immediately arrested the attention of my wife, that article is which yon say you intend to begin a new department in the Magazine to be called "Our Letter Box." My wife at once jumped to the conclusion that you intend 'o'start a "Harper's Bazaar," or "Godey's Ladies Book" on a small scale. I am under the belief that you intend only to answer letters and questions relative to the farm and its interests Please let us know in the next number what kind of letters you will answer.

A. B. Baltimore Co.

We are open to all queries concerning subjects embraced under the different heads of our columns and we will endeavor to answer questions about fashions, customs, literature, etc., calculated to enlighten the reader as well as inform the questioner. If we can not, some of our readers will, no doubt, help us to give the replies. We hope our lady-friends will be lively contributors.

Having received several anonymous communications, one from Harford County, signed L., and one from Cecil County, signed B., we are compelled to decline answering them, as we must in every case have the full name and address of parties wishing to have questions answered, not for the purpose of giving their names to the public, but as a guarantee that the parties are acting in good faith.

FINE WEATHER.—A valued lady correspondent, in sending us an excellent communication, which will appear in our April number, says.—"We have had a very remarkable winter. The air is soft and balmy, and the flowers blooming like spring time."

Salisbury, Md.

MITCHELLSVILLE MD.

* * * * I have been much benefitted by your magazine, especially by your advice two years *go, about Hungarian grass. W. J. G.

Journalistic Notices.

THE RURAL NEW YORKER is a first-class Agricultural Journal. All interested in the multifarious aims of that journal, will be happy over the RURAL NEW YORKER'S remarkable announcement in its issue of Feb 23d, which will be mailed free to any one sending address to 78 Duane St. New York.

THE DETROIT FREE PRESS says:—In addition to 300,000 Universal Almanacs just published by the extensive seed house of D. M. Ferry & Co., of our city, the firm are now publishing for gratuitious distribution, an edition of 100,000 Seed Annuals. Their former publications have been unsurpassed, but the present one promises to excel all others in utility and general excellence. It will be mailed free to all applicants.

THE INDEPENDENT VISITOR:—In the interest of the Independent Methodist Church is a neat four four page, published by J. Wesley Smith, at the office of the MARYLAND FARMER, monthly. It is ably edited, and contains matter likely to do much good, especially among the young.

CARROTS, MANGOLD WURTZELLS and SUGAR BEETS.—A small pamphlet. lately issued by J. J. H. Gregory, Marblehead, Mass. It is well worth perusal and study by all who keep even a single cow or horse. Mr. Gregory is not only a man of observance, but one thoroughly practical, and whatever he says, commands public attention, since he originated the mammoth cabbage, and other new varieties, and the remarkable winter keeping Hubbard squash—a great boon to all who love that class of vegetables, and desire to have them in perfection during Lent season, when such succellent food was so scarce before benefactor Gregory set his wits to work. We commend this little tract to our readers. Its cost is trifling.

BURKE'S TEXAS ALMANAC Gives a map and full description of Texas, in counties, with their several products, climate, and advantages, etc.

THE SOUTHERN GUIDE, an illustrated Quarterly. Price, 25 cents, published in Washington. It is well printed, prettily illustrated, and full of intercesting matter to all travellers, tourists or persons seeking locations or homes in the South.

PHOTOGRAPHIC RAYS OF LIGHT—Published by Richard Walzl, Photographist, Baltimore, Md.

We hail this new quarterly with pleasure and are glad to say, that it reflects the highest credit upon the arts of Photography and Printing in Baltimore city. The matter relates to the art of which it is the exponent, the typography and paper are admirable, and its entire make up is very superior. Price \$1,00 per year.

ANALYSIS AND COMMERCIAL VALUES OF FERTI-LIZERS, as estimated by the Agricultural Commissioner of Ceorgia—Really a valuable production.

GARDEN FARM LANDS OF THE PENINSULAR:—
Is a beautifully printed and illustrated circular, describing various noted places on the line of the Delaware division of the Delaware, Wilmington and Baltimore R. R., showing the great inducements offered to all who desire to purchase a small or large farm in a region of country so fertile. healthy and accessible to market. The Peninsular includes the entire State of Delaware, the Eastern Shore of Maryland, and two counties of Virginia. This whole section of country, about 6,000 square miles, is a veritable Eden and blessed with greater waters than the Eden of Asia, which was bounded only by four rivers.

CATALOGUES RECEIVED.

From J. J. H. Gregory, Marblehead, Mass., catalogue of vegetable and flower seeds for 1878. It is handsomely gotten up, with many illustrations and descriptions of new and promising vegetables.

John Saul's catalogue of rare and beautiful flower seeds, garden seeds, &c., for 1878, Washington, D. C.

Robert Douglass & Sons, evergreen and ornamental tree seedings, &c., Wankegan, Lake Co., Illinois.

William Parry's Pomona Nursery, Cinnaminson, N. J., fruit tree and plant catalogue.

Messrs. Nanz Neuner, Louisville, Ky., Illustrated and descriptive catalogue, for 1878, of seeds, plants and bulbs.

Randolph Peters. Descriptive Catalogue of Fruit and Ornamental Trees and Plants, Wilmington, Delaware.

Cole & Brothers, Illustrated Catalogue and Guide to the Flower and Vegetable Garden, Des Moines, Iowa.

Jacob Wrench & Sons, London Bridge, London, E. C., Agricultural, Garden and Flower Seeds.

D. M. FERRY & Co. Seed Catalogue for 1878; splendidly illustrated, and full of useful information about flowers and vegetables, Detroit, Mich. It would seem the farther we go West, the more elegant these catalogues become—this is purely a work of Michigan,—the composition, paper drawings, lithographing, printing, electrotyping, and binding—all done by Michigan artists and workmen. This speaks well for the advance of skill in that far off State.

Chr. Lorenz, Erfurt, Germany, Vegetable and Flower Catalogue.

ELLWANGER & BARRY, Mount Hope Nurseries, Rochester, N. Y., new edition of their five, elegant Catalogue of Plants, Trees, Fruits and Flowers, have been received, and they reflect great credit upon this old and highly popular and trustworthy Establishment.

E. C. Mead, Brand Oak Gardens, Keswick, Va., catalogue of vegetable, fruit and garden seeds, and plants.

Henry A. Dreer's Garden Calendar, 1878, Philadelphia; 200 pages of matter of great interest to the growers of flowers, vegetables, small fruits, &c., either as amateurs or market gardeners.

The Agricultural Society of Montgomery County was reorganized on the 19th inst., by being chartered under the Act of 1868. The following efficers were elected to serve for the ensuing year: John H. Gassaway, president; James C. Holland, Wm. W. Blunt, Americus Dawson, Nicholas D. Offutt, Asa M. Stabler and John A. Baker, vice-presidents; Joseph T. Bailey, Wm. S. Brooke, John E. Wilson, Edward C. Gilpin, and John W. Horner, executive committee; John F. Peter, secretary; E. B. Prettyman, treasurer.

The Agricultural and Mechanical Association of Wicomico, has only been existence two years, is in a very flourishing condition. The officers for 1878, are,

E. J. Pusey, President, Geo. W. Bell, Sec'tary & Treasurer.

MARLAND HORTICULTURAL SOCIETY .- Circumstances prevented our presence at the last monthly meeting of the Society, held at the Academy of Music, on the evening of the 26th inst.; but we were pleased to learn from various sources that it was a decided improvemet on the previous meeting. The exhibition of flowers, plants and vegetables was larger and finer, and the number of visitors much increased, showing that more interest was taken by the officers and members of the Ascociation, which was and always will be responded to by a discriminating community As we first started this important enterprize, and used our best energies to establish it upon a firm basis, we naturally feel the deepest interest in its prosperity, and hence are sensitive to anything that would tend to bring into disrepute, or eventuate in its abandonment.

West River Grange, No. 15, A. A. Co., MD.—We have received from the accomplished lecturer of this Grange, an important report of a committee on the subject of rotation, and advising an improved system of husbandry, requiring less labor, yet, likely to result in increased profits. It came so late to hand that it was crowded out by previous matter, which we regretted; but shall give our readers the benefit of it next month.

We have already added to our usual number of pages, fourteen columns, this month, as will be seen

by reference to this issue,

MARYLAND FARMER PREMIUMS FOR 1878.

Special Premiums to Canvassers for New Subscribers.

	Subscrib	ers.	Articles.	Values.
3	44	\$4.50	Garden seeds in retail packages	\$1.00
4	61	6.00	64 66 66 40	1.50
5	44	7.50	66 66 48 66	2.50
б	44	9.00	I. No. 18 Plow.	3.50
7	"	10,50	I, " 18½ "	4.00
8	"	12.00	I, " I9 "	5.00
9	44	13.50	I' " 10 " "	6.00
10	44	15.00	I, " 20 "	7.06
ıı	64	16 50	1 Premium Churn.	7.50
12	46	18.00	46	8.00
13	"	19.50	•	9.00
14	. "	21.00	1, No. o Hide Roller Hay Cutter	10.00
15	44	22.50	I, " I "	11.00
16	**	24.00	r. No 2 Farm Bell.	12.00
17	46	25.50	46 46	13.00
18	**	27.00	46 46	14.00
19	"	28.50	1, No. 1 Cucumber Pump, 31 ft. well	14.35
20	, "	30.00	" " 33 "	15 00
21	44	31.50	40	16 00
50	**	75.00	I Montgomery Wheat Fan.	37.00
60	, "	90.00	1 Young American Corn & Cob Mill, or Mardens' Farm Scales.	50.00
80	• "	120.00	I Four Horse Lever Power.	90.00
10	00 "	150.00	1 Two Horse Iron Axle Whitewater Wagon.	100.00

All the above articles we warrant shall be first class of the kind offered.

We feel sure that these liberal inducements will secure the efforts of many young men, who are disposed to energetic enterprises and perhaps, out of employment, or if in business to spend a few days of recreation in thus adding to their earnings and at the same time benefiting the public by spreading the light of Agricultural Knowledge.

It is not necessary to secure the subscribers all at one time, for instance:—If any one wants to get the wagon we offer for 100 new subscribers, he can send the names in any number he secures, and we will allow him a whole year to finish his club. If at the end of the year he fails to secure the full number, he is still entitled to the article named opposite the number he does send